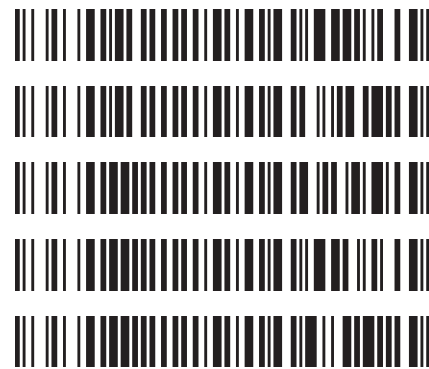


Worklist: 3246

| <u>LAB_CASE</u> | <u>ITEM</u> | <u>TASK_ID</u> | <u>DESCRIPTION</u> |
|-----------------|-------------|----------------|--|
| M2019-1340 | 4 | 147726 | AM 13 Urine LCMS-QQQ Benzodiazepines and ; |
| M2019-1415 | 3 | 147727 | AM 13 Urine LCMS-QQQ Benzodiazepines and ; |
| P2019-0866 | 1 | 147730 | AM 13 Urine LCMS-QQQ Benzodiazepines and ; |
| P2019-0989 | 1 | 147732 | AM 13 Urine LCMS-QQQ Benzodiazepines and ; |
| P2019-1006 | 1 | 147735 | AM 13 Urine LCMS-QQQ Benzodiazepines and ; |



AM 13: Benzo and Z-Drugs LCMS Urine Extraction

Extraction Date: 04/09/2019
Negative Blood/Urine Lot: POC031319
Positive Control Working Solution Lot: WS013119
Calibrator Working Solution Lot #'s: WS021319
Oxazepam Glucuronide Lot: Alltech 715-5035
LC Column: Agilent Poroshell 120 EC-C18 (2.1x75mm; 2.7 Micron)

Analyst: Celena Shrum
LCMS-QQQ ID: Abby
b-glucuronidase Lot: Kura 4150

Pre-Analytic:

- 1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
- 2. Ensure correct column is installed and begin mobile phase flow allow to equilibrate ~ 30 minutes.
- 3. Prep Non-Extracted Calibrators:

| Level | ng/mL | Working Solution (ng/μL) | Volume to add (μL) |
|-------|--------------|--------------------------|--------------------|
| Blank | - | - | - |
| 1 | 10 | 1 | 10 |
| 2 | 25 | 1 | 25 |
| 3 | 50 | 1 | 50 |
| 4 | 100 | 1 | 100 |
| 5 | 500 | 10 | 50 |
| 6 | 1000 | 10 | 100 |
| 7 | 3000 (Urine) | 10 | 300 |

Analytic:

- 1. Remove working solutions, external control, negative urine and case samples from cold storage.
- 2. **Blood:** Add 1mL samples, and controls to Extraction tube. **Urine:** To each labeled round bottomed tube add 1mL sample, using negative blood or urine sample for both negative and positive control. Positive control: spike negative blood or urine with 300uL positive control working solution. Urine Required additional glucuronide positive and negative controls.
- 3. To all samples: add 100uL Internal Standard Working Solution.
- 4. For Urine Only: Glucuronide Cleaving:
 - 4.1. Add 20uL of 2M Acetate buffer to all urine samples, Vortex.
 - 4.2. To all but negative glucuronide control: add 76uL Kura b-glucuronidase. Cap and gently rock.
 - 4.3. Place in oven at ~60C for approx. 30 minutes.
- 5. Add 4mL water to all extraction tubes. Urine Samples: Transfer into the extraction tubes.
- 6. Place on tube rocker at ambient temp for ~ 10 minutes.
- 7. Centrifuge for ~ 10 min at ~2500rpm.
Optional: To break up emulsions: re-centrifuge at ~3000rpm for ~5 minutes
- 8. Transfer solvent to tapered bottom tube and evaporate to dryness under nitrogen @ 37C.
- 9. Reconstitute with 100uL of 9:1 mobile phase A:B
- 10. Transfer to labeled ALS vial with insert.
- 11. Run using appropriate LCMS Instrument Acquisition.

Post-Analytic

- 1. Complete Data Analysis on all samples and corresponding sample blanks
 LCMS Data Path: C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246
- 2. Did positive and negative control samples provide intended response? Y / N
- 3. RT within +/-5% of Calibrators; Ion Ratios within +/- 20% of the calibrator average for the run.
- 4. Central File Packet to include: LIMS Worklist, Method Checklist, Working solution prep sheet, and Control sample LCMS data printouts.

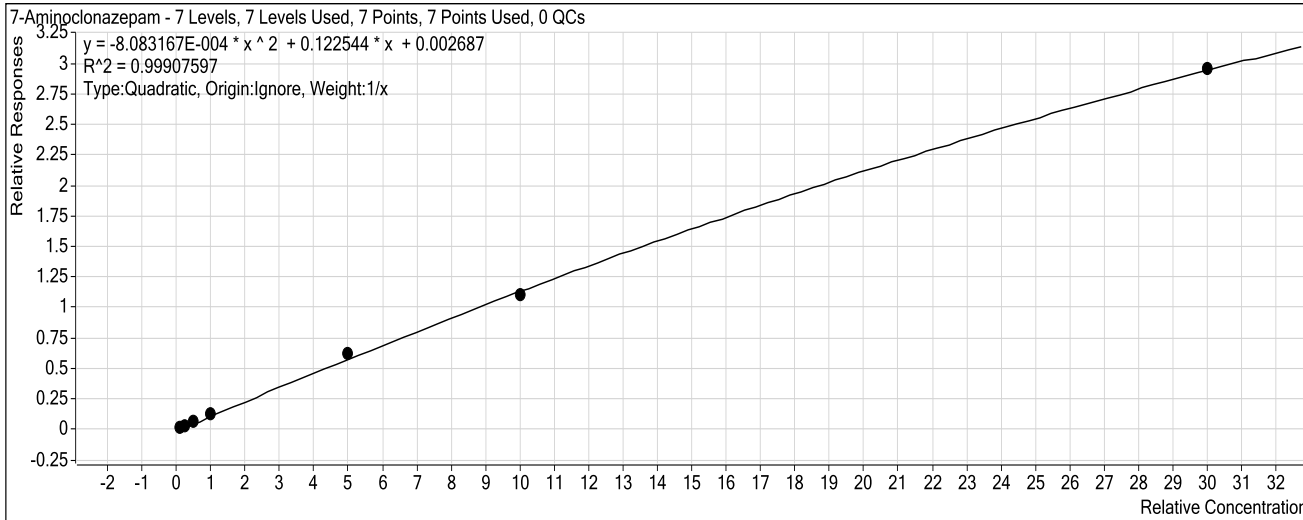
Comments:

CS

ISP Forensics Calibration Curve Report

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.batch.bin
Last Calib Update 4/11/2019 11:12 AM **Analyst Name** ISP TOX

Target Compound 7-Aminoclonazepam
Internal Standard 7-Aminoflunitrazepam-D7 ISTD



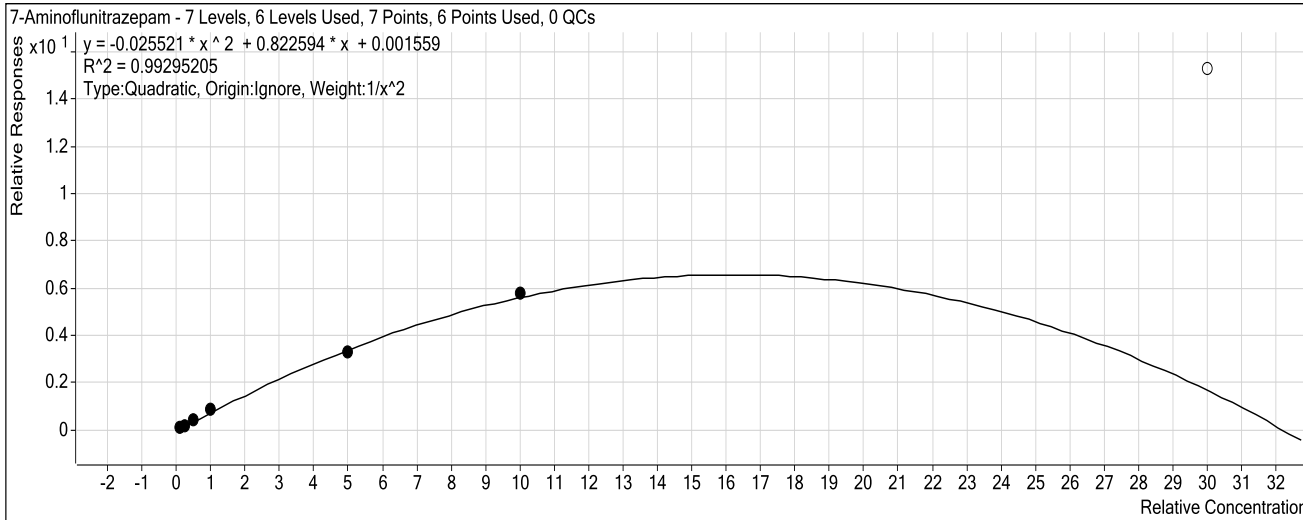
| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|------------|-------|-------------------------------------|----------|------------|----------|
| 10 ng/mL | 1 | <input checked="" type="checkbox"/> | 10 | 10.3 | 103.0 |
| 25 ng/mL | 2 | <input checked="" type="checkbox"/> | 25 | 21.2 | 84.7 |
| 50 ng/mL | 3 | <input checked="" type="checkbox"/> | 50 | 54.6 | 109.3 |
| 100 ng/mL | 4 | <input checked="" type="checkbox"/> | 100 | 101.6 | 101.6 |
| 500 ng/mL | 5 | <input checked="" type="checkbox"/> | 500 | 523.3 | 104.7 |
| 1000 ng/mL | 6 | <input checked="" type="checkbox"/> | 1000 | 964.4 | 96.4 |
| 3000 ng/mL | 7 | <input checked="" type="checkbox"/> | 3000 | 3010.9 | 100.4 |

CS

ISP Forensics Calibration Curve Report

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.batch.bin
Last Calib Update 4/11/2019 11:12 AM **Analyst Name** ISP TOX

Target Compound 7-Aminoflunitrazepam
Internal Standard 7-Aminoflunitrazepam-D7 ISTD



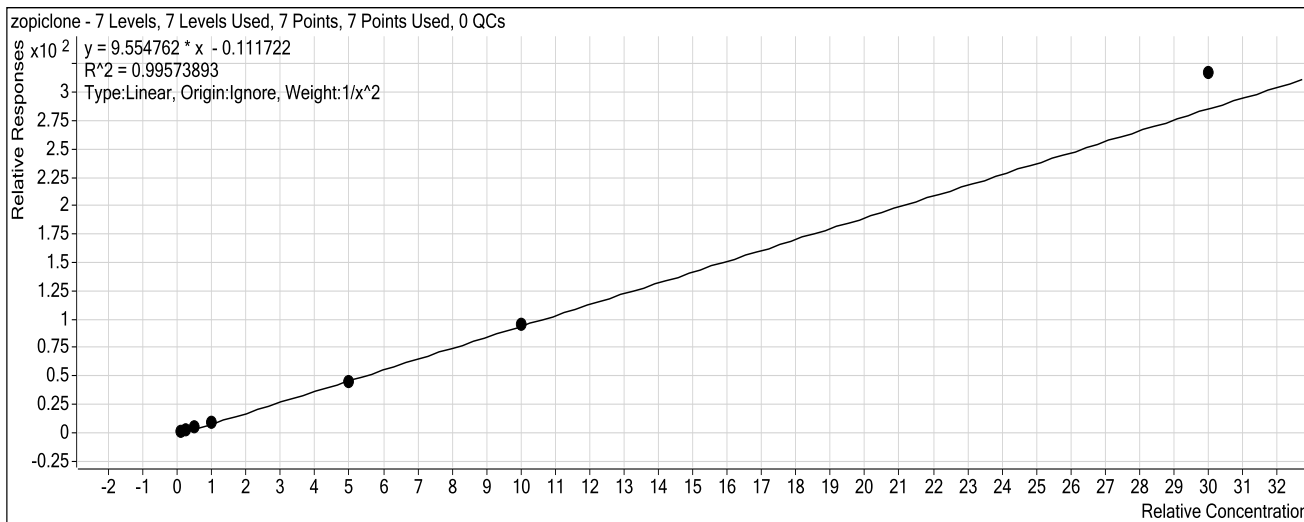
| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|------------|-------|-------------------------------------|----------|------------|----------|
| 10 ng/mL | 1 | <input checked="" type="checkbox"/> | 10 | 10.3 | 102.6 |
| 25 ng/mL | 2 | <input checked="" type="checkbox"/> | 25 | 22.4 | 89.6 |
| 50 ng/mL | 3 | <input checked="" type="checkbox"/> | 50 | 52.7 | 105.4 |
| 100 ng/mL | 4 | <input checked="" type="checkbox"/> | 100 | 105.5 | 105.5 |
| 500 ng/mL | 5 | <input checked="" type="checkbox"/> | 500 | 468.6 | 93.7 |
| 1000 ng/mL | 6 | <input checked="" type="checkbox"/> | 1000 | 1045.1 | 104.5 |
| 3000 ng/mL | 7 | <input type="checkbox"/> | 3000 | 0.0 | 0.0 |

ISP Forensics Calibration Curve Report

CS

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.batch.bin
Last Calib Update 4/11/2019 11:12 AM **Analyst Name** ISP TOX

Target Compound zopiclone
Internal Standard Nordiazepam-D5 ISTD



| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|------------|-------|-------------------------------------|----------|------------|----------|
| 10 ng/mL | 1 | <input checked="" type="checkbox"/> | 10 | 10.2 | 102.4 |
| 25 ng/mL | 2 | <input checked="" type="checkbox"/> | 25 | 23.8 | 95.2 |
| 50 ng/mL | 3 | <input checked="" type="checkbox"/> | 50 | 49.2 | 98.3 |
| 100 ng/mL | 4 | <input checked="" type="checkbox"/> | 100 | 99.7 | 99.7 |
| 500 ng/mL | 5 | <input checked="" type="checkbox"/> | 500 | 467.0 | 93.4 |
| 1000 ng/mL | 6 | <input checked="" type="checkbox"/> | 1000 | 1001.3 | 100.1 |
| 3000 ng/mL | 7 | <input checked="" type="checkbox"/> | 3000 | 3325.9 | 110.9 |

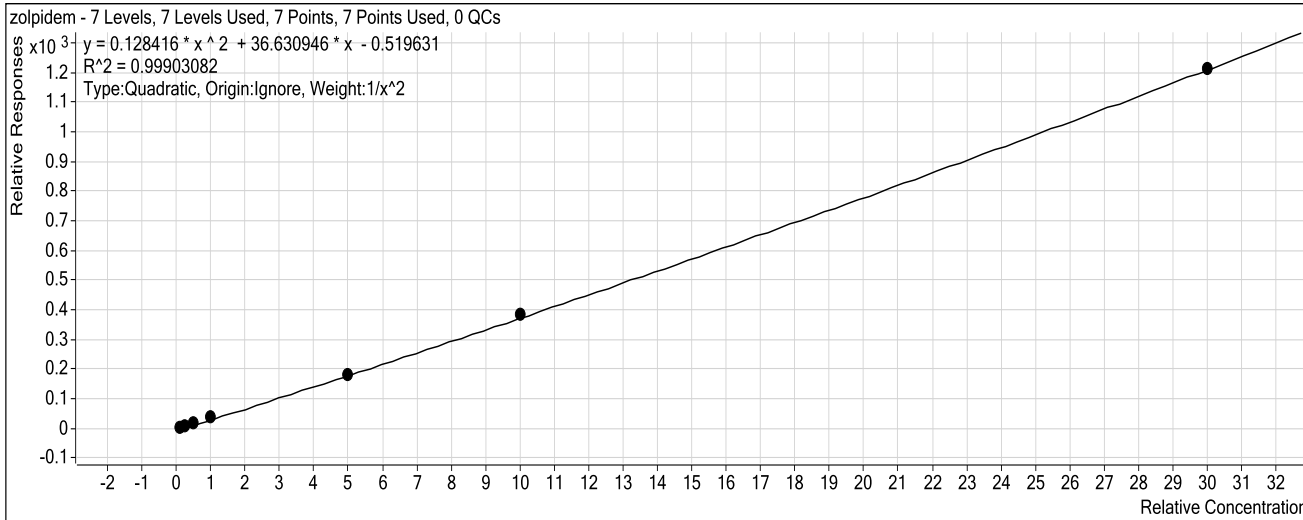
CS

ISP Forensics Calibration Curve Report

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.batch.bin

Last Calib Update 4/11/2019 11:12 AM **Analyst Name** ISP TOX

Target Compound zolpidem
Internal Standard Nordiazepam-D5 ISTD



| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|-----------|-------|-------------------------------------|----------|------------|----------|
| 10 ngmL | 1 | <input checked="" type="checkbox"/> | 10 | 10.1 | 101.1 |
| 25 ngmL | 2 | <input checked="" type="checkbox"/> | 25 | 24.0 | 95.9 |
| 50ngmL | 3 | <input checked="" type="checkbox"/> | 50 | 50.6 | 101.2 |
| 100 ngmL | 4 | <input checked="" type="checkbox"/> | 100 | 103.9 | 103.9 |
| 500ngmL | 5 | <input checked="" type="checkbox"/> | 500 | 484.3 | 96.9 |
| 1000 ngmL | 6 | <input checked="" type="checkbox"/> | 1000 | 1011.2 | 101.1 |
| 3000 ngmL | 7 | <input checked="" type="checkbox"/> | 3000 | 3000.6 | 100.0 |

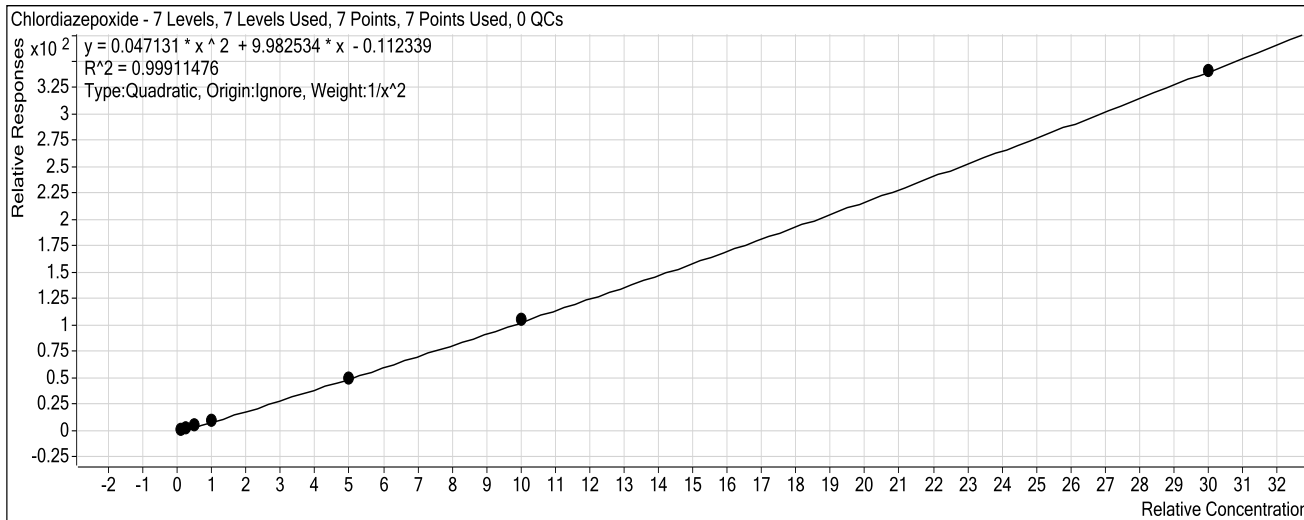
ISP Forensics Calibration Curve Report

CS

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.batch.bin

Last Calib Update 4/11/2019 11:12 AM **Analyst Name** ISP TOX

Target Compound *Chlordiazepoxide*
Internal Standard *Nordiazepam-D5 ISTD*



| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|------------|-------|-------------------------------------|----------|------------|----------|
| 10 ng/mL | 1 | <input checked="" type="checkbox"/> | 10 | 10.1 | 101.1 |
| 25 ng/mL | 2 | <input checked="" type="checkbox"/> | 25 | 24.2 | 96.8 |
| 50 ng/mL | 3 | <input checked="" type="checkbox"/> | 50 | 49.4 | 98.8 |
| 100 ng/mL | 4 | <input checked="" type="checkbox"/> | 100 | 104.8 | 104.8 |
| 500 ng/mL | 5 | <input checked="" type="checkbox"/> | 500 | 488.2 | 97.6 |
| 1000 ng/mL | 6 | <input checked="" type="checkbox"/> | 1000 | 1009.0 | 100.9 |
| 3000 ng/mL | 7 | <input checked="" type="checkbox"/> | 3000 | 2999.2 | 100.0 |

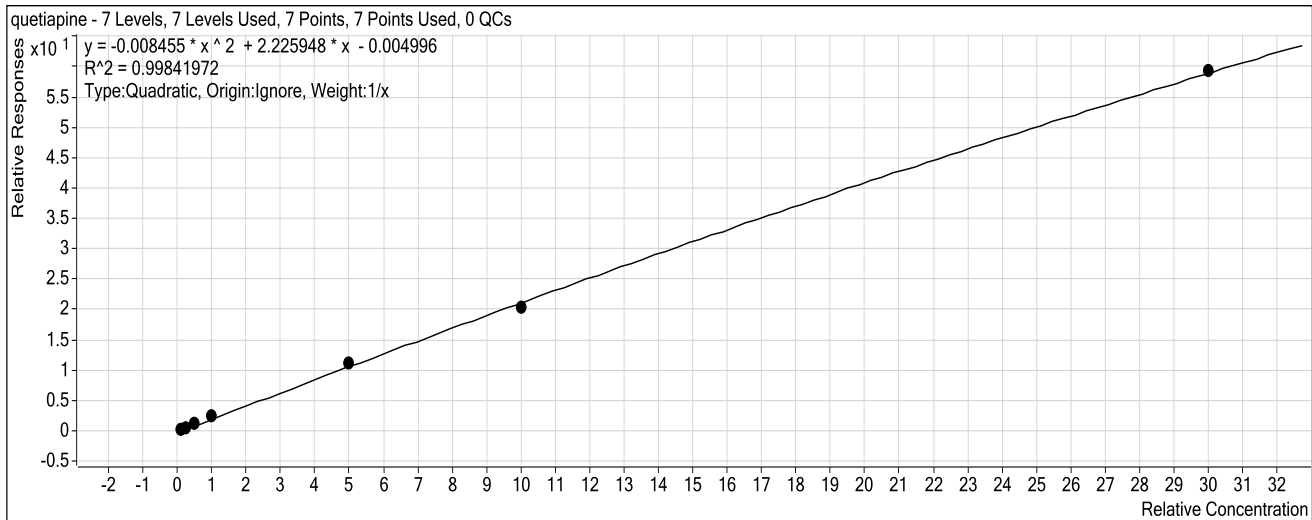
ISP Forensics Calibration Curve Report

CS

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.batch.bin

Last Calib Update 4/11/2019 11:12 AM **Analyst Name** ISP TOX

Target Compound *quetiapine*
Internal Standard *Temazepam-D5 ISTD*



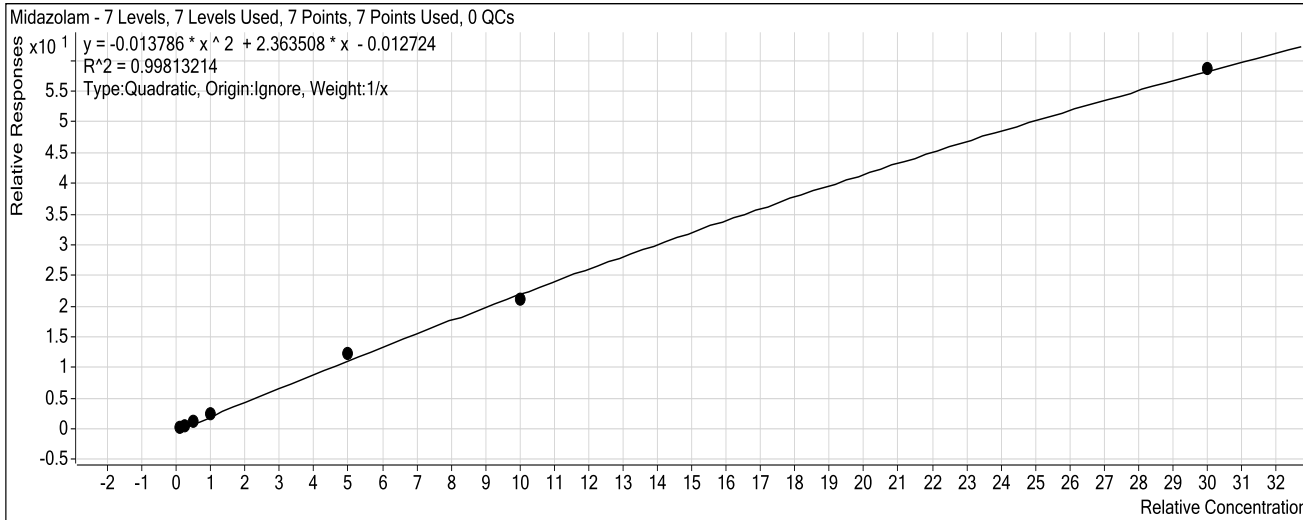
| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|------------|-------|-------------------------------------|----------|------------|----------|
| 10 ng/mL | 1 | <input checked="" type="checkbox"/> | 10 | 8.4 | 84.4 |
| 25 ng/mL | 2 | <input checked="" type="checkbox"/> | 25 | 22.4 | 89.6 |
| 50 ng/mL | 3 | <input checked="" type="checkbox"/> | 50 | 56.3 | 112.5 |
| 100 ng/mL | 4 | <input checked="" type="checkbox"/> | 100 | 114.4 | 114.4 |
| 500 ng/mL | 5 | <input checked="" type="checkbox"/> | 500 | 516.9 | 103.4 |
| 1000 ng/mL | 6 | <input checked="" type="checkbox"/> | 1000 | 952.5 | 95.3 |
| 3000 ng/mL | 7 | <input checked="" type="checkbox"/> | 3000 | 3014.8 | 100.5 |

cg

ISP Forensics Calibration Curve Report

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.batch.bin
Last Calib Update 4/11/2019 11:12 AM **Analyst Name** ISP TOX

Target Compound Midazolam
Internal Standard Clonazepam-D4 ISTD



| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|------------|-------|-------------------------------------|----------|------------|----------|
| 10 ng/mL | 1 | <input checked="" type="checkbox"/> | 10 | 9.5 | 94.7 |
| 25 ng/mL | 2 | <input checked="" type="checkbox"/> | 25 | 22.3 | 89.2 |
| 50 ng/mL | 3 | <input checked="" type="checkbox"/> | 50 | 55.2 | 110.4 |
| 100 ng/mL | 4 | <input checked="" type="checkbox"/> | 100 | 103.5 | 103.5 |
| 500 ng/mL | 5 | <input checked="" type="checkbox"/> | 500 | 537.6 | 107.5 |
| 1000 ng/mL | 6 | <input checked="" type="checkbox"/> | 1000 | 941.3 | 94.1 |
| 3000 ng/mL | 7 | <input checked="" type="checkbox"/> | 3000 | 3017.4 | 100.6 |

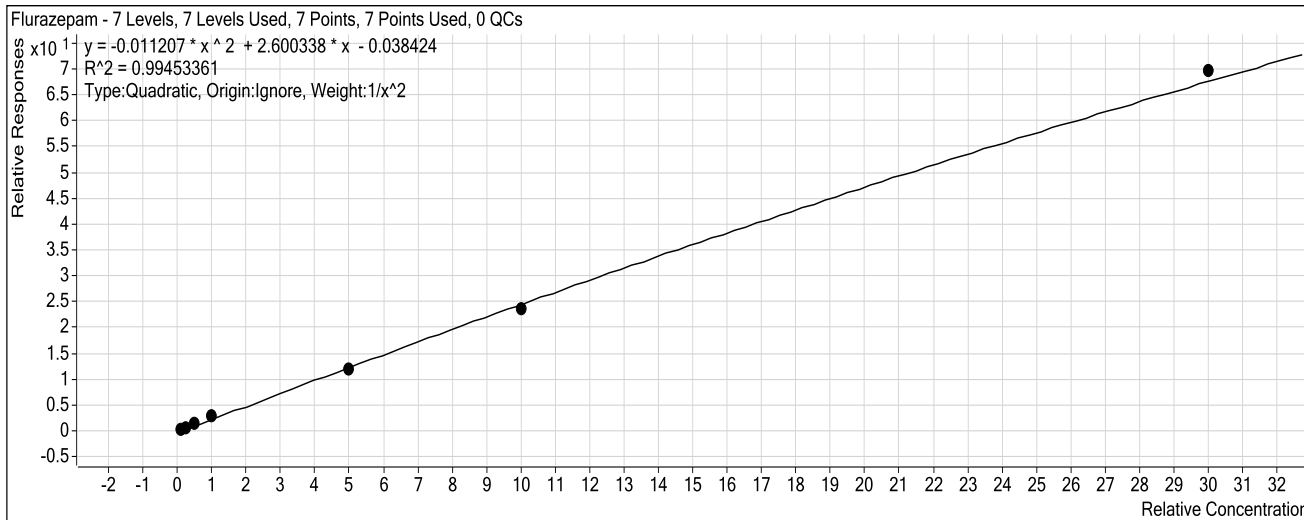
ISP Forensics Calibration Curve Report

CJ

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.batch.bin

Last Calib Update 4/11/2019 11:12 AM **Analyst Name** ISP TOX

Target Compound *Flurazepam*
Internal Standard *Diazepam-D5 ISTD*



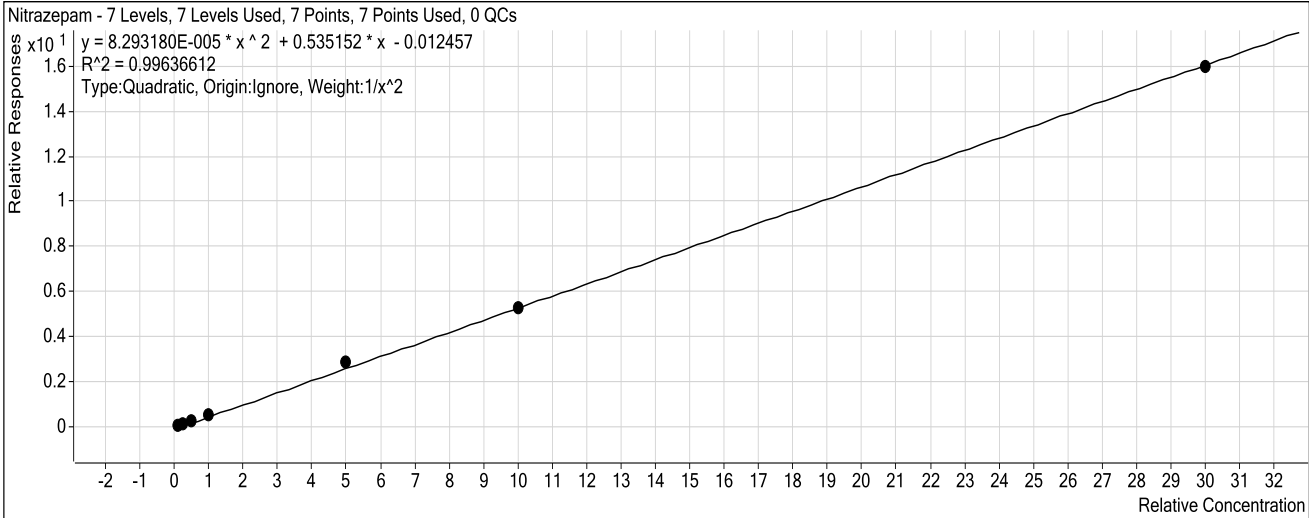
| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|------------|-------|-------------------------------------|----------|------------|----------|
| 10 ng/mL | 1 | <input checked="" type="checkbox"/> | 10 | 10.1 | 100.6 |
| 25 ng/mL | 2 | <input checked="" type="checkbox"/> | 25 | 23.4 | 93.5 |
| 50 ng/mL | 3 | <input checked="" type="checkbox"/> | 50 | 53.6 | 107.2 |
| 100 ng/mL | 4 | <input checked="" type="checkbox"/> | 100 | 107.9 | 107.9 |
| 500 ng/mL | 5 | <input checked="" type="checkbox"/> | 500 | 466.5 | 93.3 |
| 1000 ng/mL | 6 | <input checked="" type="checkbox"/> | 1000 | 945.0 | 94.5 |
| 3000 ng/mL | 7 | <input checked="" type="checkbox"/> | 3000 | 3098.6 | 103.3 |

ISP Forensics Calibration Curve Report

CS

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.batch.bin
Last Calib Update 4/11/2019 11:12 AM **Analyst Name** ISP TOX

Target Compound Nitrazepam
Internal Standard Clonazepam-D4 ISTD



| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|------------|-------|-------------------------------------|----------|------------|----------|
| 10 ng/mL | 1 | <input checked="" type="checkbox"/> | 10 | 10.4 | 103.7 |
| 25 ng/mL | 2 | <input checked="" type="checkbox"/> | 25 | 22.4 | 89.6 |
| 50 ng/mL | 3 | <input checked="" type="checkbox"/> | 50 | 50.6 | 101.3 |
| 100 ng/mL | 4 | <input checked="" type="checkbox"/> | 100 | 100.6 | 100.6 |
| 500 ng/mL | 5 | <input checked="" type="checkbox"/> | 500 | 531.5 | 106.3 |
| 1000 ng/mL | 6 | <input checked="" type="checkbox"/> | 1000 | 992.2 | 99.2 |
| 3000 ng/mL | 7 | <input checked="" type="checkbox"/> | 3000 | 2977.4 | 99.2 |

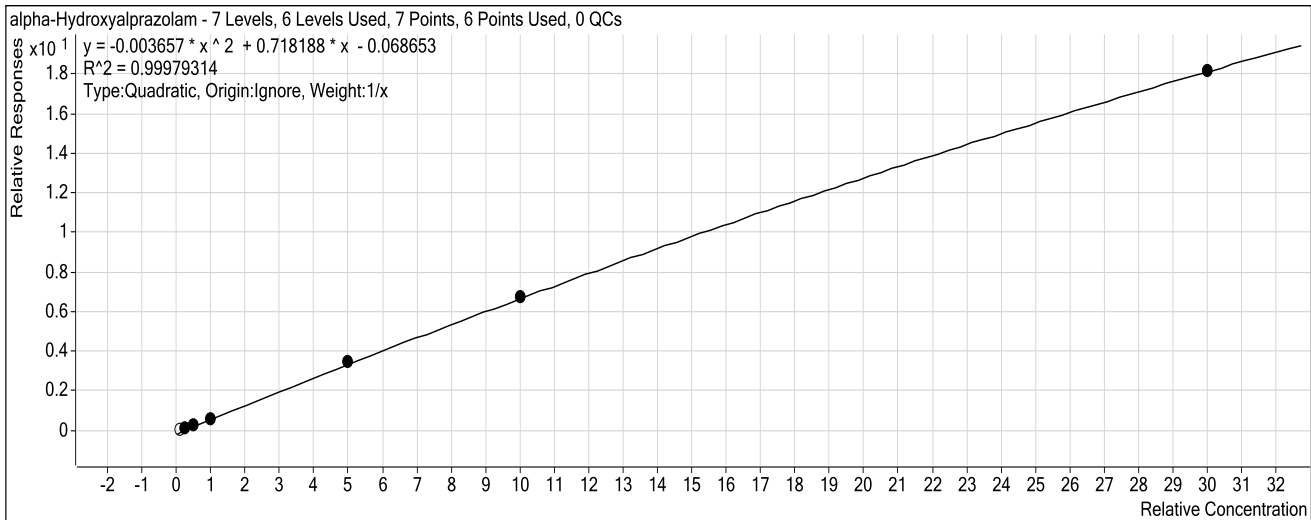
ISP Forensics Calibration Curve Report

CS

No cases can be reported as inconclusive for this compound for this run.

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.batch.bin
Last Calib Update 4/11/2019 11:12 AM **Analyst Name** ISP TOX

Target Compound *alpha-Hydroxyalprazolam*
Internal Standard *alphahydroxyalprazolam-D5 ISTD*



| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|------------|-------|-------------------------------------|----------|------------|----------|
| 10 ng/mL | 1 | <input type="checkbox"/> | 10 | 14.4 | 144.2 |
| 25 ng/mL | 2 | <input checked="" type="checkbox"/> | 25 | 25.1 | 100.3 |
| 50 ng/mL | 3 | <input checked="" type="checkbox"/> | 50 | 52.7 | 105.4 |
| 100 ng/mL | 4 | <input checked="" type="checkbox"/> | 100 | 93.3 | 93.3 |
| 500 ng/mL | 5 | <input checked="" type="checkbox"/> | 500 | 506.5 | 101.3 |
| 1000 ng/mL | 6 | <input checked="" type="checkbox"/> | 1000 | 997.6 | 99.8 |
| 3000 ng/mL | 7 | <input checked="" type="checkbox"/> | 3000 | 2999.8 | 100.0 |

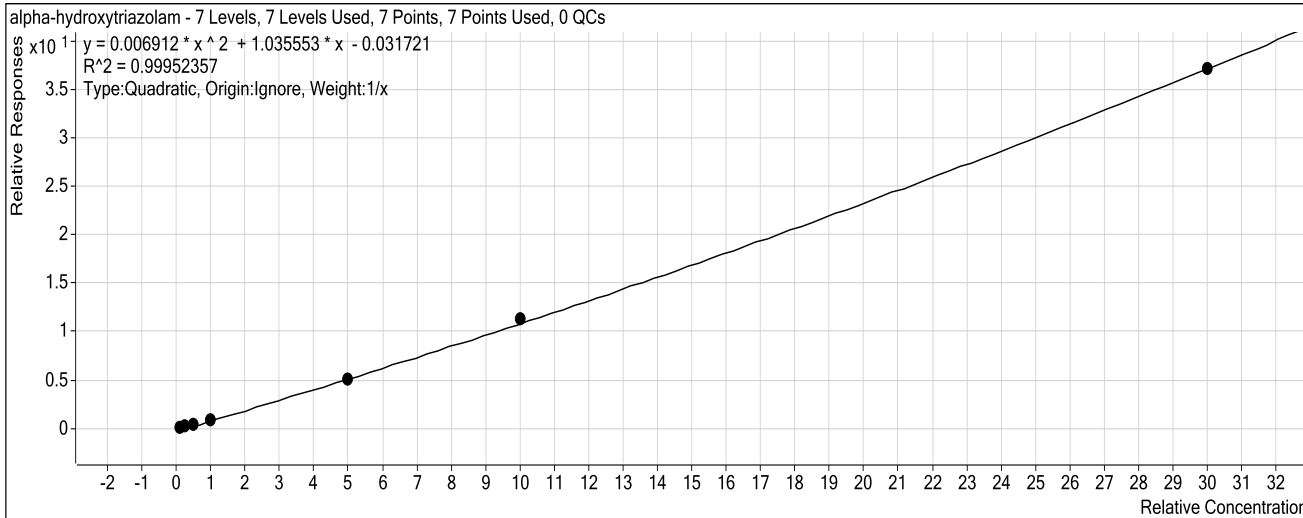
CS

ISP Forensics Calibration Curve Report

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.batch.bin

Last Calib Update 4/11/2019 11:12 AM **Analyst Name** ISP TOX

Target Compound *alpha-hydroxytriazolam*
Internal Standard *Nordiazepam-D5 ISTD*

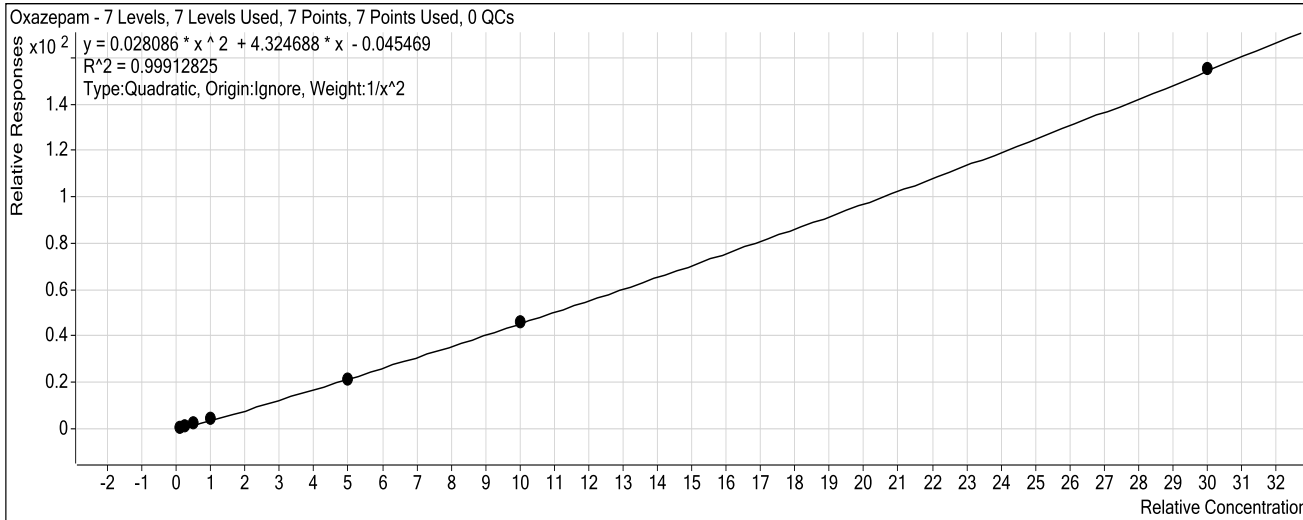


| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|------------|-------|-------------------------------------|----------|------------|----------|
| 10 ng/mL | 1 | <input checked="" type="checkbox"/> | 10 | 11.5 | 115.1 |
| 25 ng/mL | 2 | <input checked="" type="checkbox"/> | 25 | 24.9 | 99.7 |
| 50 ng/mL | 3 | <input checked="" type="checkbox"/> | 50 | 45.5 | 91.1 |
| 100 ng/mL | 4 | <input checked="" type="checkbox"/> | 100 | 94.7 | 94.7 |
| 500 ng/mL | 5 | <input checked="" type="checkbox"/> | 500 | 483.1 | 96.6 |
| 1000 ng/mL | 6 | <input checked="" type="checkbox"/> | 1000 | 1030.6 | 103.1 |
| 3000 ng/mL | 7 | <input checked="" type="checkbox"/> | 3000 | 2994.0 | 99.8 |

ISP Forensics Calibration Curve Report

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.batch.bin
Last Calib Update 4/11/2019 11:12 AM **Analyst Name** ISP TOX

Target Compound Oxazepam
Internal Standard Nordiazepam-D5 ISTD

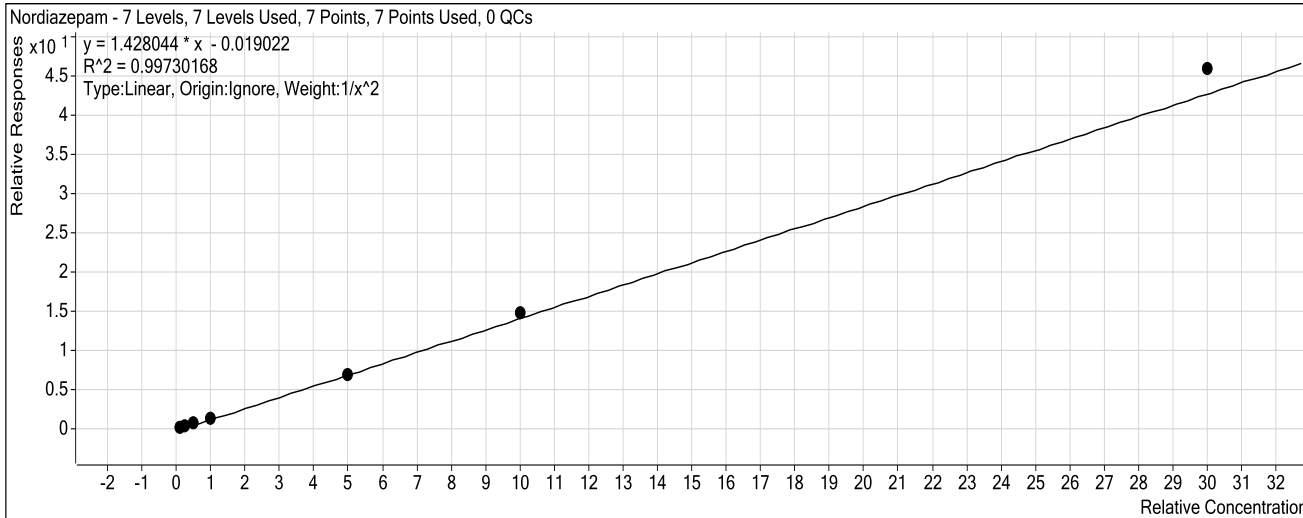


| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|------------|-------|-------------------------------------|----------|------------|----------|
| 10 ng/mL | 1 | <input checked="" type="checkbox"/> | 10 | 10.0 | 100.4 |
| 25 ng/mL | 2 | <input checked="" type="checkbox"/> | 25 | 24.3 | 97.0 |
| 50 ng/mL | 3 | <input checked="" type="checkbox"/> | 50 | 51.4 | 102.9 |
| 100 ng/mL | 4 | <input checked="" type="checkbox"/> | 100 | 103.0 | 103.0 |
| 500 ng/mL | 5 | <input checked="" type="checkbox"/> | 500 | 480.0 | 96.0 |
| 1000 ng/mL | 6 | <input checked="" type="checkbox"/> | 1000 | 1004.4 | 100.4 |
| 3000 ng/mL | 7 | <input checked="" type="checkbox"/> | 3000 | 3009.0 | 100.3 |

ISP Forensics Calibration Curve Report

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.batch.bin
Last Calib Update 4/11/2019 11:12 AM **Analyst Name** ISP TOX

Target Compound Nordiazepam
Internal Standard Nordiazepam-D5 ISTD

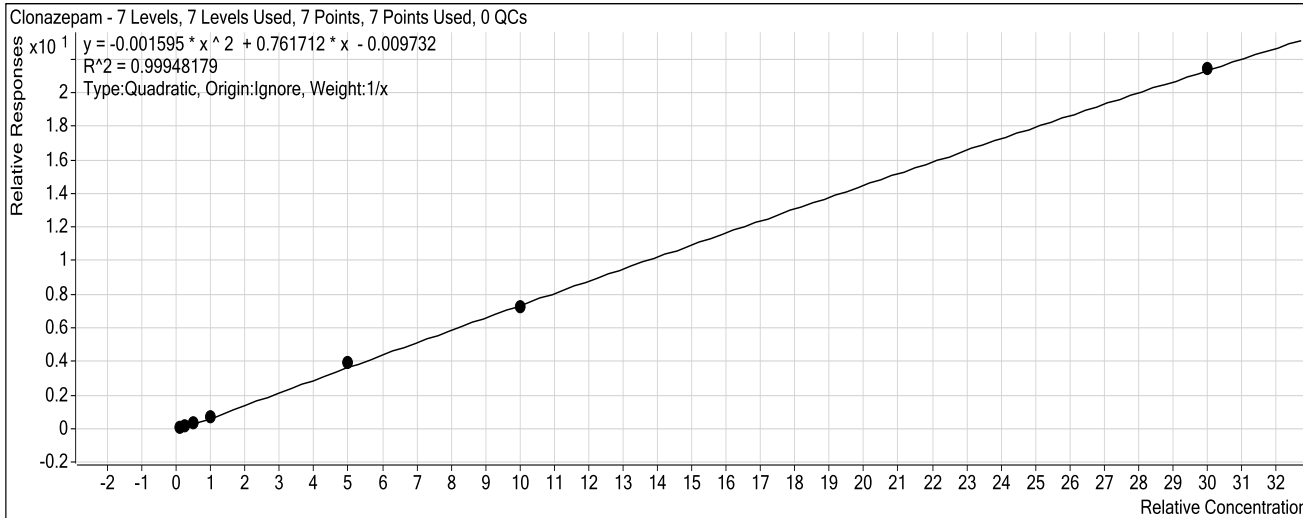


| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|-----------|-------|-------------------------------------|----------|------------|----------|
| 10 ngmL | 1 | <input checked="" type="checkbox"/> | 10 | 10.3 | 102.7 |
| 25 ngmL | 2 | <input checked="" type="checkbox"/> | 25 | 24.0 | 96.2 |
| 50ngmL | 3 | <input checked="" type="checkbox"/> | 50 | 47.4 | 94.8 |
| 100 ngmL | 4 | <input checked="" type="checkbox"/> | 100 | 99.1 | 99.1 |
| 500ngmL | 5 | <input checked="" type="checkbox"/> | 500 | 483.8 | 96.8 |
| 1000 ngmL | 6 | <input checked="" type="checkbox"/> | 1000 | 1032.0 | 103.2 |
| 3000 ngmL | 7 | <input checked="" type="checkbox"/> | 3000 | 3216.9 | 107.2 |

ISP Forensics Calibration Curve Report

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.batch.bin
Last Calib Update 4/11/2019 11:12 AM **Analyst Name** ISP TOX

Target Compound Clonazepam
Internal Standard Clonazepam-D4 ISTD

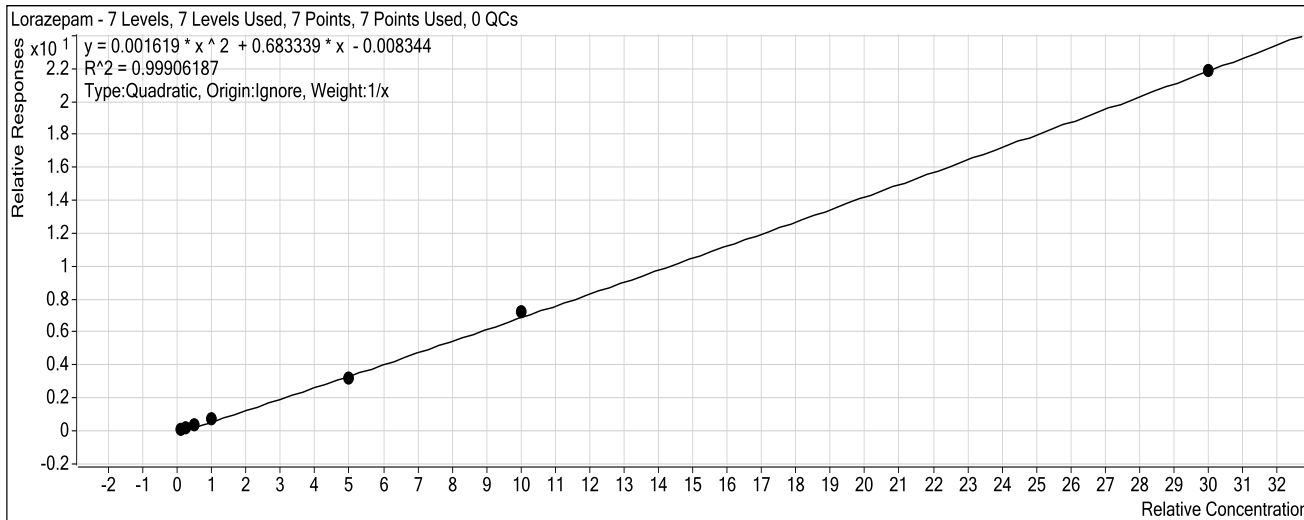


| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|-----------|-------|-------------------------------------|----------|------------|----------|
| 10 ngmL | 1 | <input checked="" type="checkbox"/> | 10 | 9.6 | 96.0 |
| 25 ngmL | 2 | <input checked="" type="checkbox"/> | 25 | 24.4 | 97.6 |
| 50ngmL | 3 | <input checked="" type="checkbox"/> | 50 | 52.6 | 105.2 |
| 100 ngmL | 4 | <input checked="" type="checkbox"/> | 100 | 99.4 | 99.4 |
| 500ngmL | 5 | <input checked="" type="checkbox"/> | 500 | 523.0 | 104.6 |
| 1000 ngmL | 6 | <input checked="" type="checkbox"/> | 1000 | 969.1 | 96.9 |
| 3000 ngmL | 7 | <input checked="" type="checkbox"/> | 3000 | 3007.0 | 100.2 |

ISP Forensics Calibration Curve Report

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.batch.bin
Last Calib Update 4/11/2019 11:12 AM **Analyst Name** ISP TOX

Target Compound Lorazepam
Internal Standard Nordiazepam-D5 ISTD



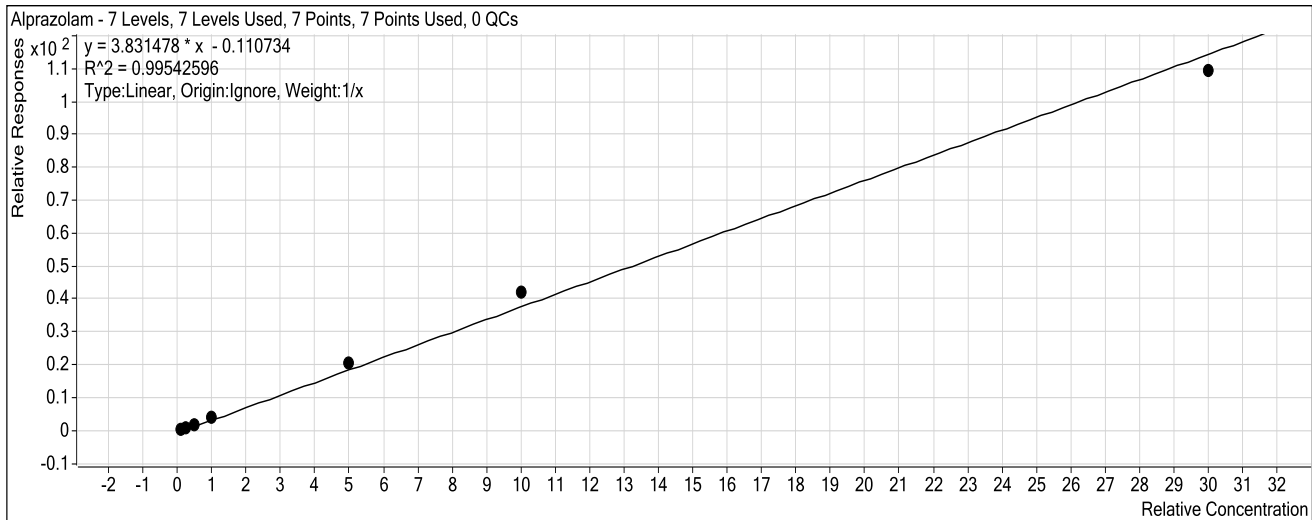
| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|------------|-------|-------------------------------------|----------|------------|----------|
| 10 ng/mL | 1 | <input checked="" type="checkbox"/> | 10 | 11.0 | 109.7 |
| 25 ng/mL | 2 | <input checked="" type="checkbox"/> | 25 | 20.7 | 82.9 |
| 50 ng/mL | 3 | <input checked="" type="checkbox"/> | 50 | 52.1 | 104.2 |
| 100 ng/mL | 4 | <input checked="" type="checkbox"/> | 100 | 106.6 | 106.6 |
| 500 ng/mL | 5 | <input checked="" type="checkbox"/> | 500 | 468.0 | 93.6 |
| 1000 ng/mL | 6 | <input checked="" type="checkbox"/> | 1000 | 1031.6 | 103.2 |
| 3000 ng/mL | 7 | <input checked="" type="checkbox"/> | 3000 | 2994.9 | 99.8 |

ISP Forensics Calibration Curve Report

CS

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.batch.bin
Last Calib Update 4/11/2019 11:12 AM **Analyst Name** ISP TOX

Target Compound Alprazolam
Internal Standard alphahydroxyalprazolam-D5 ISTD

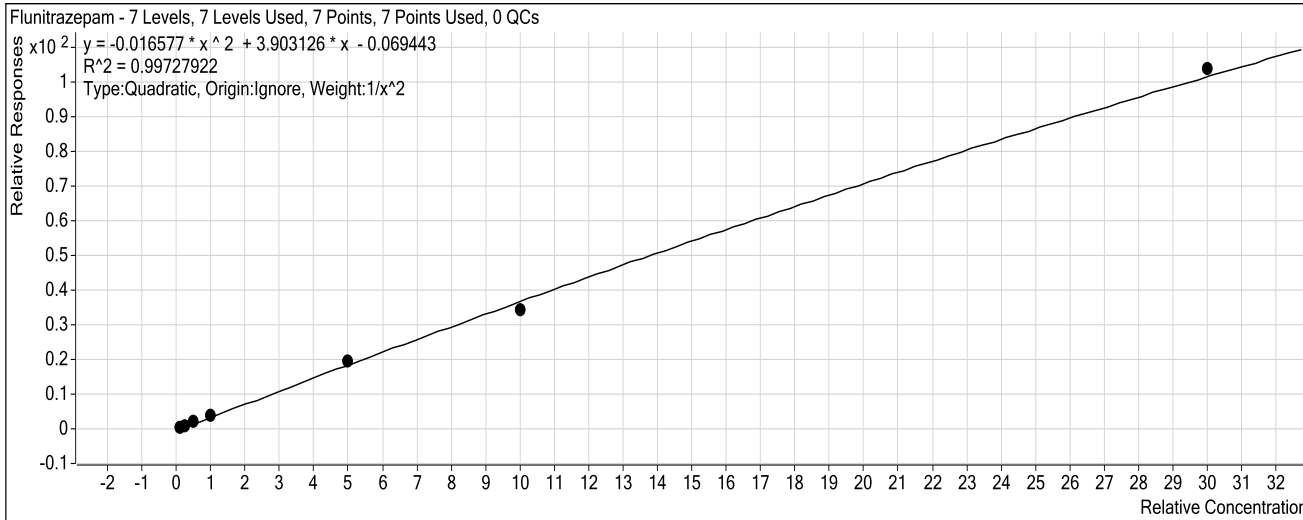


| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|------------|-------|-------------------------------------|----------|------------|----------|
| 10 ng/mL | 1 | <input checked="" type="checkbox"/> | 10 | 9.6 | 95.5 |
| 25 ng/mL | 2 | <input checked="" type="checkbox"/> | 25 | 22.4 | 89.8 |
| 50 ng/mL | 3 | <input checked="" type="checkbox"/> | 50 | 46.4 | 92.8 |
| 100 ng/mL | 4 | <input checked="" type="checkbox"/> | 100 | 108.8 | 108.8 |
| 500 ng/mL | 5 | <input checked="" type="checkbox"/> | 500 | 540.9 | 108.2 |
| 1000 ng/mL | 6 | <input checked="" type="checkbox"/> | 1000 | 1095.7 | 109.6 |
| 3000 ng/mL | 7 | <input checked="" type="checkbox"/> | 3000 | 2861.3 | 95.4 |

ISP Forensics Calibration Curve Report

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.batch.bin
Last Calib Update 4/11/2019 11:12 AM **Analyst Name** ISP TOX

Target Compound Flunitrazepam
Internal Standard Clonazepam-D4 ISTD



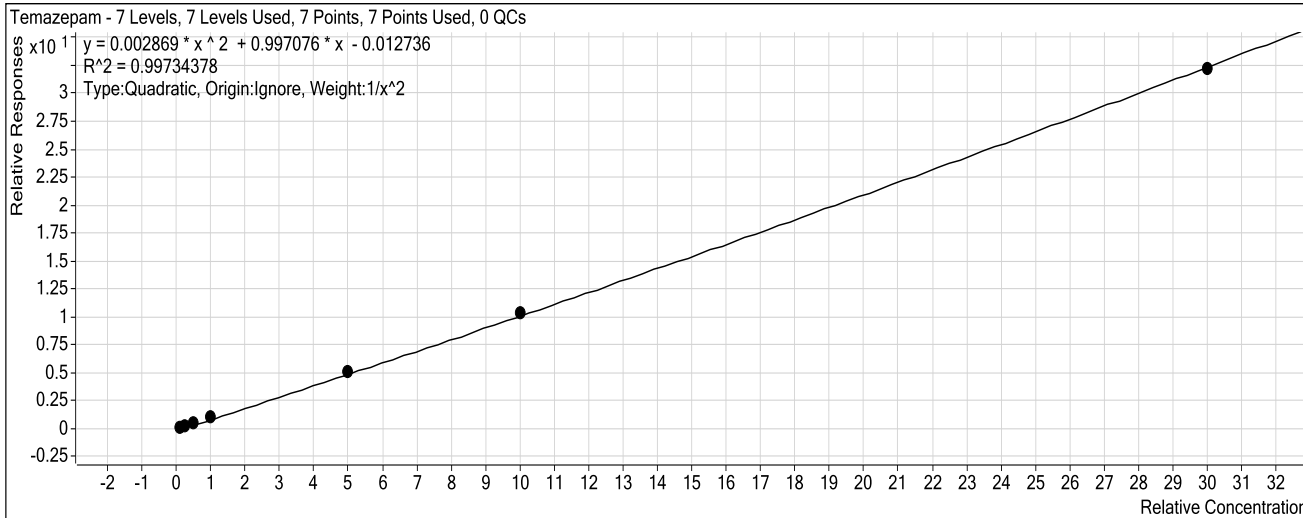
| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|------------|-------|-------------------------------------|----------|------------|----------|
| 10 ng/mL | 1 | <input checked="" type="checkbox"/> | 10 | 10.1 | 100.7 |
| 25 ng/mL | 2 | <input checked="" type="checkbox"/> | 25 | 23.9 | 95.5 |
| 50 ng/mL | 3 | <input checked="" type="checkbox"/> | 50 | 52.4 | 104.8 |
| 100 ng/mL | 4 | <input checked="" type="checkbox"/> | 100 | 100.9 | 100.9 |
| 500 ng/mL | 5 | <input checked="" type="checkbox"/> | 500 | 519.1 | 103.8 |
| 1000 ng/mL | 6 | <input checked="" type="checkbox"/> | 1000 | 920.8 | 92.1 |
| 3000 ng/mL | 7 | <input checked="" type="checkbox"/> | 3000 | 3070.5 | 102.3 |

ISP Forensics Calibration Curve Report

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.batch.bin

Last Calib Update 4/11/2019 11:12 AM **Analyst Name** ISP TOX

Target Compound *Temazepam*
Internal Standard *Temazepam-D5 ISTD*



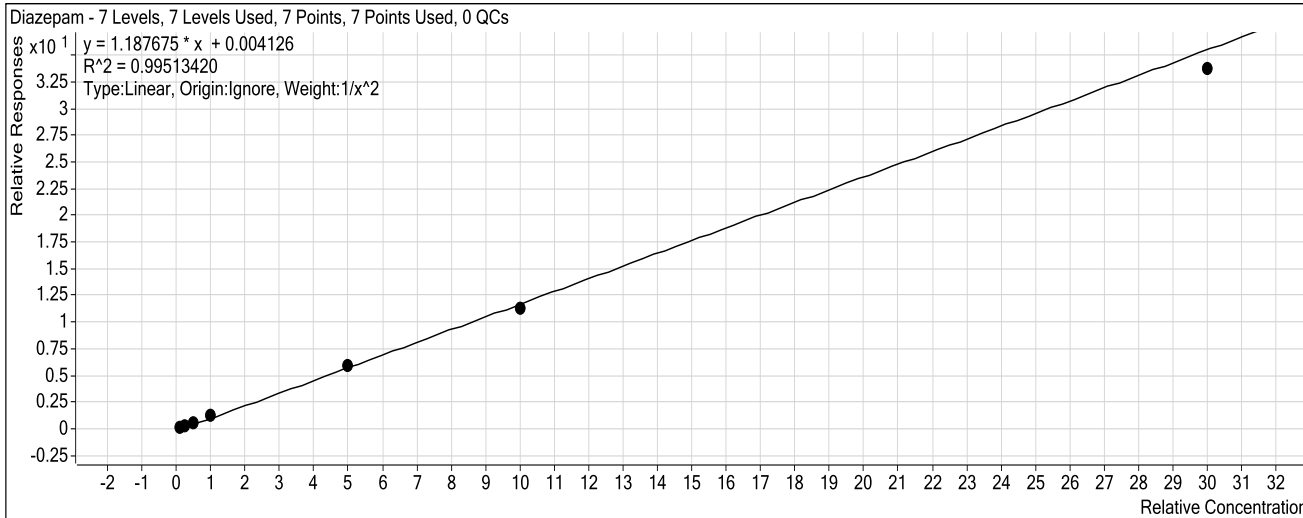
| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|------------|-------|-------------------------------------|----------|------------|----------|
| 10 ng/mL | 1 | <input checked="" type="checkbox"/> | 10 | 10.3 | 103.5 |
| 25 ng/mL | 2 | <input checked="" type="checkbox"/> | 25 | 22.6 | 90.3 |
| 50 ng/mL | 3 | <input checked="" type="checkbox"/> | 50 | 49.9 | 99.8 |
| 100 ng/mL | 4 | <input checked="" type="checkbox"/> | 100 | 103.9 | 103.9 |
| 500 ng/mL | 5 | <input checked="" type="checkbox"/> | 500 | 510.8 | 102.2 |
| 1000 ng/mL | 6 | <input checked="" type="checkbox"/> | 1000 | 1010.2 | 101.0 |
| 3000 ng/mL | 7 | <input checked="" type="checkbox"/> | 3000 | 2979.8 | 99.3 |

CS

ISP Forensics Calibration Curve Report

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.batch.bin
Last Calib Update 4/11/2019 11:12 AM **Analyst Name** ISP TOX

Target Compound *Diazepam*
Internal Standard *Diazepam-D5 ISTD*



| Sample | Level | Enabled | Exp Conc | Final Conc | Accuracy |
|------------|-------|-------------------------------------|----------|------------|----------|
| 10 ng/mL | 1 | <input checked="" type="checkbox"/> | 10 | 10.0 | 100.4 |
| 25 ng/mL | 2 | <input checked="" type="checkbox"/> | 25 | 23.5 | 94.1 |
| 50 ng/mL | 3 | <input checked="" type="checkbox"/> | 50 | 52.5 | 105.0 |
| 100 ng/mL | 4 | <input checked="" type="checkbox"/> | 100 | 110.6 | 110.6 |
| 500 ng/mL | 5 | <input checked="" type="checkbox"/> | 500 | 498.6 | 99.7 |
| 1000 ng/mL | 6 | <input checked="" type="checkbox"/> | 1000 | 954.6 | 95.5 |
| 3000 ng/mL | 7 | <input checked="" type="checkbox"/> | 3000 | 2842.9 | 94.8 |

ISP FORENSICS

Pocatello

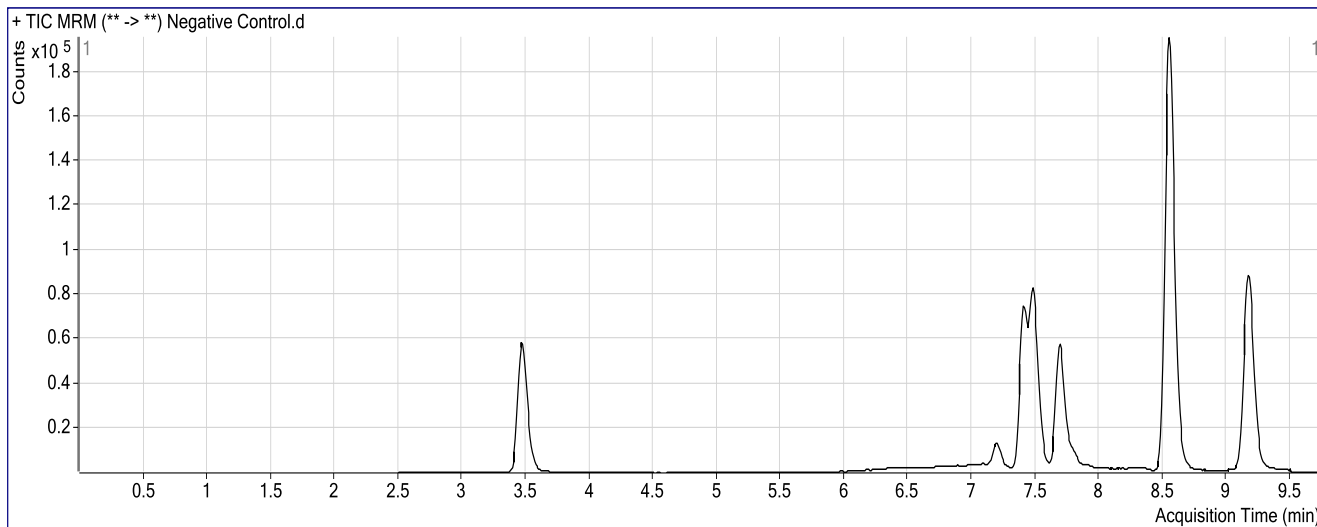
Benzodiazepine Analysis Report

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 wor
Analysis Time 4/11/2019 11:12 AM **Analyst Name** datastor
Report Time 4/11/2019 11:15 AM **Reporter Name** datastor
Last Calib Update 4/11/2019 11:12 AM **Batch State** Processed

Analysis Info

Acq Time 2019-04-09 16:16 **Data File** Negative Control.d
Sample Type Sample **Sample Name** Negative Control
Dilution 1 **Acq Method** Benzos_Z_Drugs_ACN_FA_ISP_2019.m
Position P1-B1 **Sample Info** Negative Urine lot POC031319; Worklist 3246
Inj Vol -1 **Comment** AM 13 Benzo and Z by LCQQQ

Sample Chromatogram



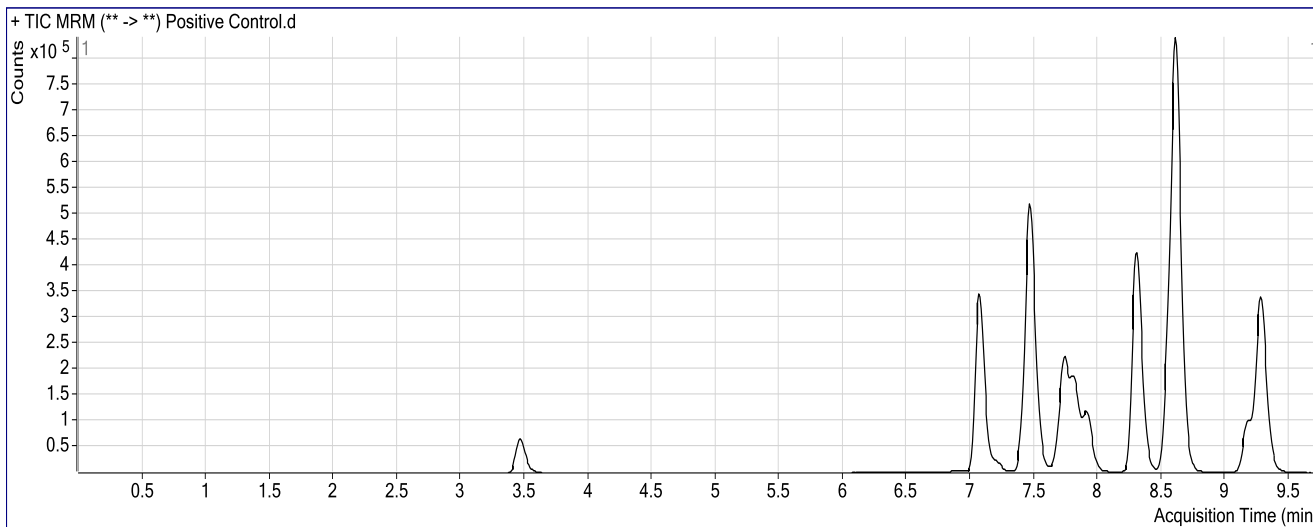
ISP FORENSICS Pocatello Benzodiazepine Analysis Report

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.ba
Analysis Time 4/11/2019 11:12 AM **Analyst Name** datastor
Report Time 4/11/2019 11:15 AM **Reporter Name** datastor
Last Calib Update 4/11/2019 11:12 AM **Batch State** Processed

Analysis Info

Acq Time 2019-04-09 16:01 **Data File** Positive Control.d
Sample Type Sample **Sample Name** Positive Control
Dilution 1 **Acq Method** Benzos_Z_Drugs_ACN_FA_ISP_2019.m
Position P1-B2 **Sample Info** 300 ng/mL Benzodiazepines Mix Cerilliant lot FE04221402 in neg LOT PO
Inj Vol -1 **Comment** AM 13 Benzo and Z by LCQQQ

Sample Chromatogram



Results

| Compound | ISTD Compound | RT | Response | ISTD Resp | Resp Ratio | Final Conc |
|---------------|--------------------------------|-------|----------|-----------|------------|------------|
| Nitrazepam | Clonazepam-D4 ISTD | 7.068 | 1141414 | 288906 | 3.9508 | 739.7399 |
| Oxazepam | Nordiazepam-D5 ISTD | 7.464 | 1394962 | 191429 | 7.2871 | 167.7246 |
| Clonazepam | Clonazepam-D4 ISTD | 7.739 | 631967 | 288906 | 2.1874 | 290.2160 |
| Lorazepam | Nordiazepam-D5 ISTD | 7.823 | 151849 | 191429 | 0.7932 | 116.9796 |
| Alprazolam | alphahydroxyalprazolam-D5 ISTD | 7.917 | 487964 | 60209 | 8.1045 | 214.4149 |
| Flunitrazepam | Clonazepam-D4 ISTD | 8.303 | 1580994 | 288906 | 5.4723 | 142.8499 |
| Temazepam | Temazepam-D5 ISTD | 8.614 | 3053106 | 997035 | 3.0622 | 305.7046 |
| Diazepam | Diazepam-D5 ISTD | 9.277 | 1313161 | 319936 | 4.1045 | 345.2399 |

ISP FORENSICS

Pocatello

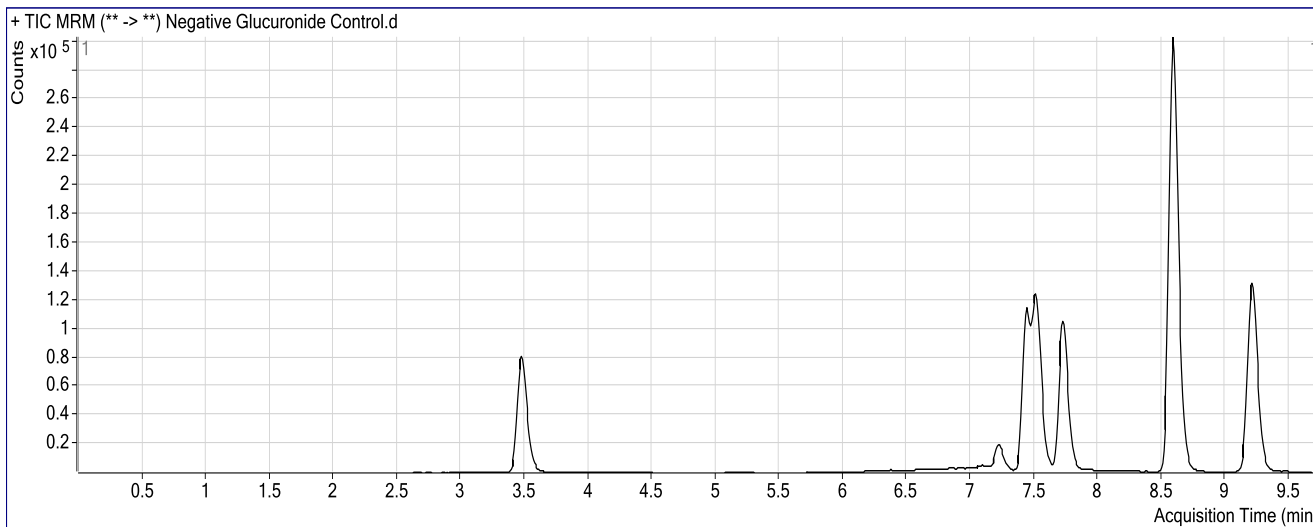
Benzodiazepine Analysis Report

| | | | |
|--------------------------|---|----------------------|-----------|
| Batch Data Path | C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.ba | | |
| Analysis Time | 4/11/2019 11:12 AM | Analyst Name | datastor |
| Report Time | 4/11/2019 11:15 AM | Reporter Name | datastor |
| Last Calib Update | 4/11/2019 11:12 AM | Batch State | Processed |

Analysis Info

| | | | |
|--------------------|------------------|--------------------|--|
| Acq Time | 2019-04-09 15:45 | Data File | Negative Glucuronide Control.d |
| Sample Type | Sample | Sample Name | Negative Glucuronide Control |
| Dilution | 1 | Acq Method | Benzos_Z_Drugs_ACN_FA_ISP_2019.m |
| Position | P1-A9 | Sample Info | 300 ng/mL Alltech lot 715-5035 in neg lot POC031319; Worklist 3246 |
| Inj Vol | -1 | Comment | AM 13 Benzo and Z by LCQQQ |

Sample Chromatogram



Results

| Compound | ISTD Compound | RT | Response | ISTD Resp | Resp Ratio | Final Conc |
|----------|---------------------|-------|----------|-----------|------------|------------|
| Oxazepam | Nordiazepam-D5 ISTD | 7.480 | 9370 | 241606 | 0.0388 | 1.9479 |

ISP FORENSICS

Pocatello

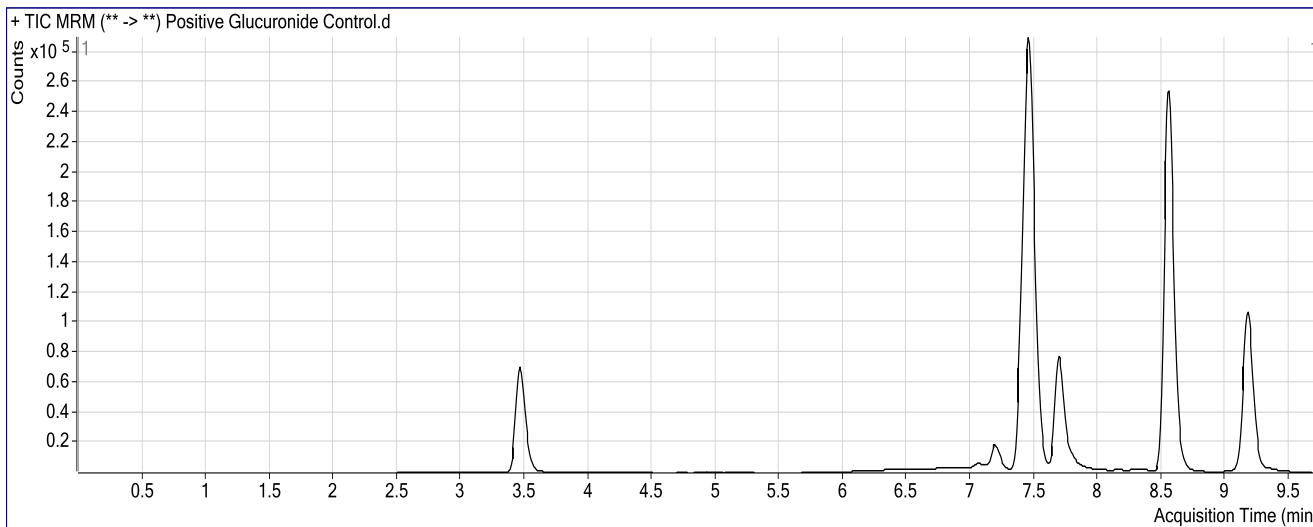
Benzodiazepine Analysis Report

| | | | |
|--------------------------|---|----------------------|-----------|
| Batch Data Path | C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.ba | | |
| Analysis Time | 4/11/2019 11:12 AM | Analyst Name | datastor |
| Report Time | 4/11/2019 11:15 AM | Reporter Name | datastor |
| Last Calib Update | 4/11/2019 11:12 AM | Batch State | Processed |

Analysis Info

| | | | |
|--------------------|------------------|--------------------|--|
| Acq Time | 2019-04-09 15:29 | Data File | Positive Glucuronide Control.d |
| Sample Type | Sample | Sample Name | Positive Glucuronide Control |
| Dilution | 1 | Acq Method | Benzos_Z_Drugs_ACN_FA_ISP_2019.m |
| Position | P1-B3 | Sample Info | 300 ng/mL Alltech lot 715-5035 in neg lot POC031319; Worklist 3246 |
| Inj Vol | -1 | Comment | AM 13 Benzo and Z by LCQQQ |

Sample Chromatogram



Results

| Compound | ISTD Compound | RT | Response | ISTD Resp | Resp Ratio | Final Conc |
|----------|---------------------|-------|----------|-----------|------------|------------|
| Oxazepam | Nordiazepam-D5 ISTD | 7.455 | 650756 | 199346 | 3.2645 | 76.1589 |

ISP FORENSICS

Pocatello

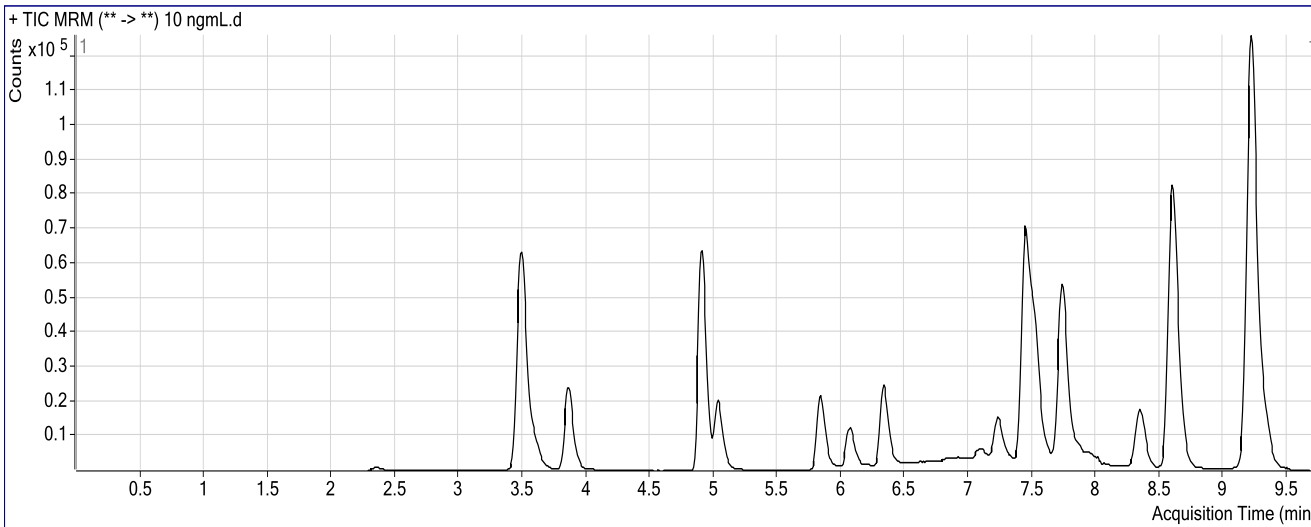
Benzodiazepine Analysis Report

| | | | |
|--------------------------|---|----------------------|-----------|
| Batch Data Path | C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.ba | | |
| Analysis Time | 4/11/2019 11:12 AM | Analyst Name | datastor |
| Report Time | 4/11/2019 11:14 AM | Reporter Name | datastor |
| Last Calib Update | 4/11/2019 11:12 AM | Batch State | Processed |

Analysis Info

| | | | |
|--------------------|------------------|--------------------|----------------------------------|
| Acq Time | 2019-04-09 13:25 | Data File | 10 ngmL.d |
| Sample Type | Calibration | Sample Name | 10 ngmL |
| Dilution | 1 | Acq Method | Benzos_Z_Drugs_ACN_FA_ISP_2019.m |
| Position | P1-A2 | Sample Info | Worklist 3246 |
| Inj Vol | -1 | Comment | AM 13 Benzo and Z by LCQQQ |

Sample Chromatogram



Results

| Compound | ISTD Compound | RT | Response | ISTD Resp | Resp Ratio | Final Conc |
|-------------------------|--------------------------------|-------|----------|-----------|------------|------------|
| 7-Aminoclonazepam | 7-Aminoflunitrazepam-D7 ISTD | 2.359 | 4482 | 292856 | 0.0153 | 10.3019 |
| 7-Aminoflunitrazepam | 7-Aminoflunitrazepam-D7 ISTD | 3.598 | 25103 | 292856 | 0.0857 | 10.2635 |
| zopiclone | Nordiazepam-D5 ISTD | 3.859 | 60100 | 69357 | 0.8665 | 10.2384 |
| zolpidem | Nordiazepam-D5 ISTD | 4.909 | 220859 | 69357 | 3.1844 | 10.1081 |
| Chlordiazepoxide | Nordiazepam-D5 ISTD | 5.036 | 62229 | 69357 | 0.8972 | 10.1085 |
| quetiapine | Temazepam-D5 ISTD | 5.834 | 62129 | 339785 | 0.1828 | 8.4415 |
| Midazolam | Clonazepam-D4 ISTD | 6.063 | 41536 | 196909 | 0.2109 | 9.4685 |
| Flurazepam | Diazepam-D5 ISTD | 6.328 | 90415 | 405533 | 0.2230 | 10.0560 |
| Nitrazepam | Clonazepam-D4 ISTD | 7.102 | 8478 | 196909 | 0.0431 | 10.3731 |
| alpha-Hydroxyalprazolam | alphahydroxyalprazolam-D5 ISTD | 7.265 | 1716 | 49254 | 0.0348 | 14.4213 |
| alpha-hydroxytriazolam | Nordiazepam-D5 ISTD | 7.323 | 6071 | 69357 | 0.0875 | 11.5067 |
| Oxazepam | Nordiazepam-D5 ISTD | 7.489 | 26976 | 69357 | 0.3889 | 10.0384 |
| Nordiazepam | Nordiazepam-D5 ISTD | 7.617 | 8849 | 69357 | 0.1276 | 10.2662 |
| Clonazepam | Clonazepam-D4 ISTD | 7.764 | 12483 | 196909 | 0.0634 | 9.6023 |
| Lorazepam | Nordiazepam-D5 ISTD | 7.847 | 4621 | 69357 | 0.0666 | 10.9684 |
| Alprazolam | alphahydroxyalprazolam-D5 ISTD | 7.942 | 12577 | 49254 | 0.2554 | 9.5548 |
| Flunitrazepam | Clonazepam-D4 ISTD | 8.344 | 63725 | 196909 | 0.3236 | 10.0750 |
| Temazepam | Temazepam-D5 ISTD | 8.656 | 30737 | 339785 | 0.0905 | 10.3467 |
| Diazepam | Diazepam-D5 ISTD | 9.318 | 50017 | 405533 | 0.1233 | 10.0373 |

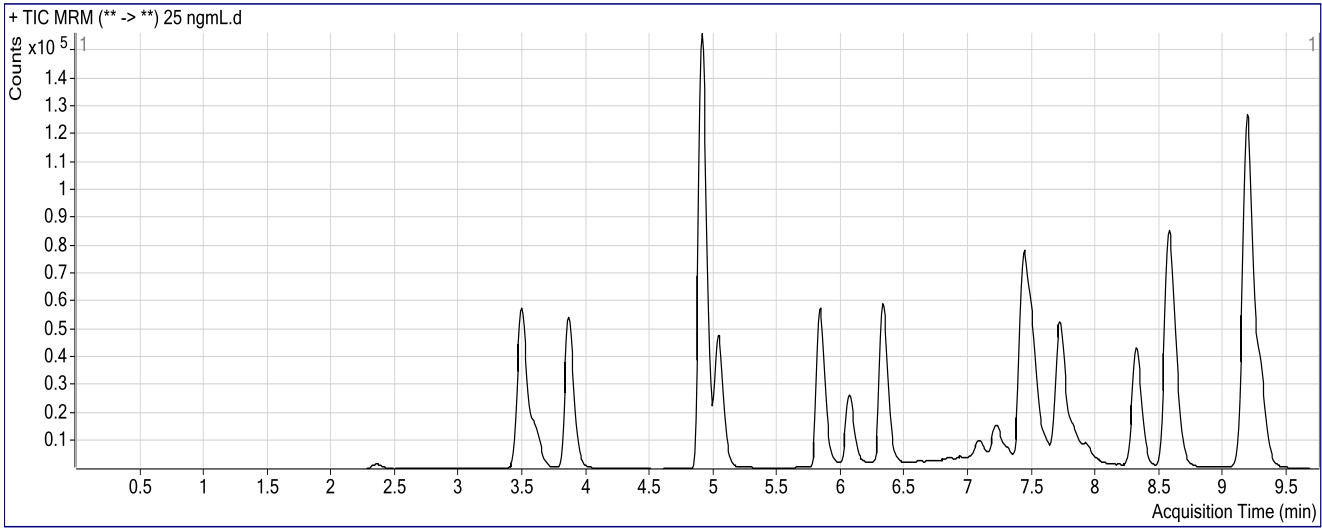
ISP FORENSICS Pocatello Benzodiazepine Analysis Report

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.ba
Analysis Time 4/11/2019 11:12 AM **Analyst Name** datastor
Report Time 4/11/2019 11:14 AM **Reporter Name** datastor
Last Calib Update 4/11/2019 11:12 AM **Batch State** Processed

Analysis Info

Acq Time 2019-04-09 13:40 **Data File** 25 ngmL.d
Sample Type Calibration **Sample Name** 25 ngmL
Dilution 1 **Acq Method** Benzos_Z_Drugs_ACN_FA_ISP_2019.m
Position P1-A3 **Sample Info** Worklist 3246
Inj Vol -1 **Comment** AM 13 Benzo and Z by LCQQQ

Sample Chromatogram



Results

| Compound | ISTD Compound | RT | Response | ISTD Resp | Resp Ratio | Final Conc |
|-------------------------|--------------------------------|-------|----------|-----------|------------|------------|
| 7-Aminoclonazepam | 7-Aminoflunitrazepam-D7 ISTD | 2.359 | 7460 | 260832 | 0.0286 | 21.1758 |
| 7-Aminoflunitrazepam | 7-Aminoflunitrazepam-D7 ISTD | 3.606 | 48118 | 260832 | 0.1845 | 22.3926 |
| zopiclone | Nordiazepam-D5 ISTD | 3.859 | 141097 | 65267 | 2.1618 | 23.7950 |
| zolpidem | Nordiazepam-D5 ISTD | 4.909 | 539497 | 65267 | 8.2660 | 23.9640 |
| Chlordiazepoxide | Nordiazepam-D5 ISTD | 5.044 | 150483 | 65267 | 2.3056 | 24.1945 |
| quetiapine | Temazepam-D5 ISTD | 5.834 | 167877 | 340364 | 0.4932 | 22.4016 |
| Midazolam | Clonazepam-D4 ISTD | 6.063 | 91927 | 178872 | 0.5139 | 22.3116 |
| Flurazepam | Diazepam-D5 ISTD | 6.319 | 231343 | 406809 | 0.5687 | 23.3706 |
| Nitrazepam | Clonazepam-D4 ISTD | 7.085 | 19214 | 178872 | 0.1074 | 22.3990 |
| alpha-Hydroxyalprazolam | alphahydroxyalprazolam-D5 ISTD | 7.248 | 4568 | 41102 | 0.1111 | 25.0661 |
| alpha-hydroxytriazolam | Nordiazepam-D5 ISTD | 7.314 | 14799 | 65267 | 0.2267 | 24.9179 |
| Oxazepam | Nordiazepam-D5 ISTD | 7.480 | 65618 | 65267 | 1.0054 | 24.2606 |
| Nordiazepam | Nordiazepam-D5 ISTD | 7.600 | 21166 | 65267 | 0.3243 | 24.0408 |
| Clonazepam | Clonazepam-D4 ISTD | 7.748 | 31499 | 178872 | 0.1761 | 24.4091 |
| Lorazepam | Nordiazepam-D5 ISTD | 7.839 | 8705 | 65267 | 0.1334 | 20.7294 |
| Alprazolam | alphahydroxyalprazolam-D5 ISTD | 7.925 | 30789 | 41102 | 0.7491 | 22.4410 |
| Flunitrazepam | Clonazepam-D4 ISTD | 8.311 | 154122 | 178872 | 0.8616 | 23.8789 |
| Temazepam | Temazepam-D5 ISTD | 8.622 | 72355 | 340364 | 0.2126 | 22.5832 |
| Diazepam | Diazepam-D5 ISTD | 9.293 | 115326 | 406809 | 0.2835 | 23.5218 |

ISP FORENSICS

Pocatello

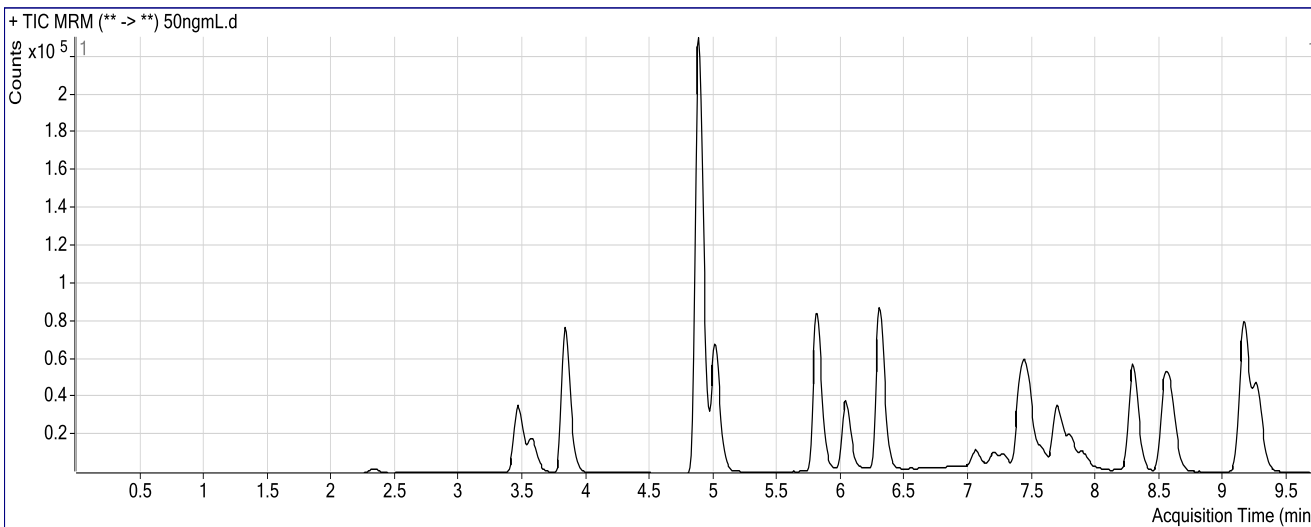
Benzodiazepine Analysis Report

| | | | |
|--------------------------|---|----------------------|-----------|
| Batch Data Path | C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.ba | | |
| Analysis Time | 4/11/2019 11:12 AM | Analyst Name | datastor |
| Report Time | 4/11/2019 11:14 AM | Reporter Name | datastor |
| Last Calib Update | 4/11/2019 11:12 AM | Batch State | Processed |

Analysis Info

| | | | |
|--------------------|------------------|--------------------|----------------------------------|
| Acq Time | 2019-04-09 13:56 | Data File | 50ngmL.d |
| Sample Type | Calibration | Sample Name | 50ngmL |
| Dilution | 1 | Acq Method | Benzos_Z_Drugs_ACN_FA_ISP_2019.m |
| Position | P1-A4 | Sample Info | Worklist 3246 |
| Inj Vol | -1 | Comment | AM 13 Benzo and Z by LCQQQ |

Sample Chromatogram



Results

| Compound | ISTD Compound | RT | Response | ISTD Resp | Resp Ratio | Final Conc |
|-------------------------|---------------------------------|-------|----------|-----------|------------|------------|
| 7-Aminoclonazepam | 7-Aminoflunitrazepam-D7 ISTD | 2.334 | 11018 | 158761 | 0.0694 | 54.6373 |
| 7-Aminoflunitrazepam | 7-Aminoflunitrazepam-D7 ISTD | 3.581 | 67950 | 158761 | 0.4280 | 52.7031 |
| zopiclone | Nordiazepam-D5 ISTD | 3.834 | 202024 | 44049 | 4.5863 | 49.1698 |
| zolpidem | Nordiazepam-D5 ISTD | 4.883 | 795073 | 44049 | 18.0497 | 50.6032 |
| Chlordiazepoxide | Nordiazepam-D5 ISTD | 5.019 | 212759 | 44049 | 4.8300 | 49.3951 |
| quetiapine | Temazepam-D5 ISTD | 5.809 | 250748 | 201441 | 1.2448 | 56.2655 |
| Midazolam | Clonazepam-D4 ISTD | 6.038 | 136207 | 105766 | 1.2878 | 55.2036 |
| Flurazepam | Diazepam-D5 ISTD | 6.294 | 344657 | 254963 | 1.3518 | 53.5866 |
| Nitrazepam | Clonazepam-D4 ISTD | 7.060 | 27339 | 105766 | 0.2585 | 50.6255 |
| alpha-Hydroxyalprazolam | alphanhydroxyalprazolam-D5 ISTD | 7.231 | 6614 | 21411 | 0.3089 | 52.7099 |
| alpha-hydroxytriazolam | Nordiazepam-D5 ISTD | 7.272 | 19442 | 44049 | 0.4414 | 45.5459 |
| Oxazepam | Nordiazepam-D5 ISTD | 7.447 | 96312 | 44049 | 2.1865 | 51.4372 |
| Nordiazepam | Nordiazepam-D5 ISTD | 7.583 | 28989 | 44049 | 0.6581 | 47.4165 |
| Clonazepam | Clonazepam-D4 ISTD | 7.739 | 41284 | 105766 | 0.3903 | 52.5796 |
| Lorazepam | Nordiazepam-D5 ISTD | 7.806 | 15338 | 44049 | 0.3482 | 52.1130 |
| Alprazolam | alphanhydroxyalprazolam-D5 ISTD | 7.891 | 35688 | 21411 | 1.6668 | 46.3918 |
| Flunitrazepam | Clonazepam-D4 ISTD | 8.286 | 208410 | 105766 | 1.9705 | 52.3803 |
| Temazepam | Temazepam-D5 ISTD | 8.597 | 97816 | 201441 | 0.4856 | 49.9064 |
| Diazepam | Diazepam-D5 ISTD | 9.268 | 160019 | 254963 | 0.6276 | 52.4966 |

ISP FORENSICS

Pocatello

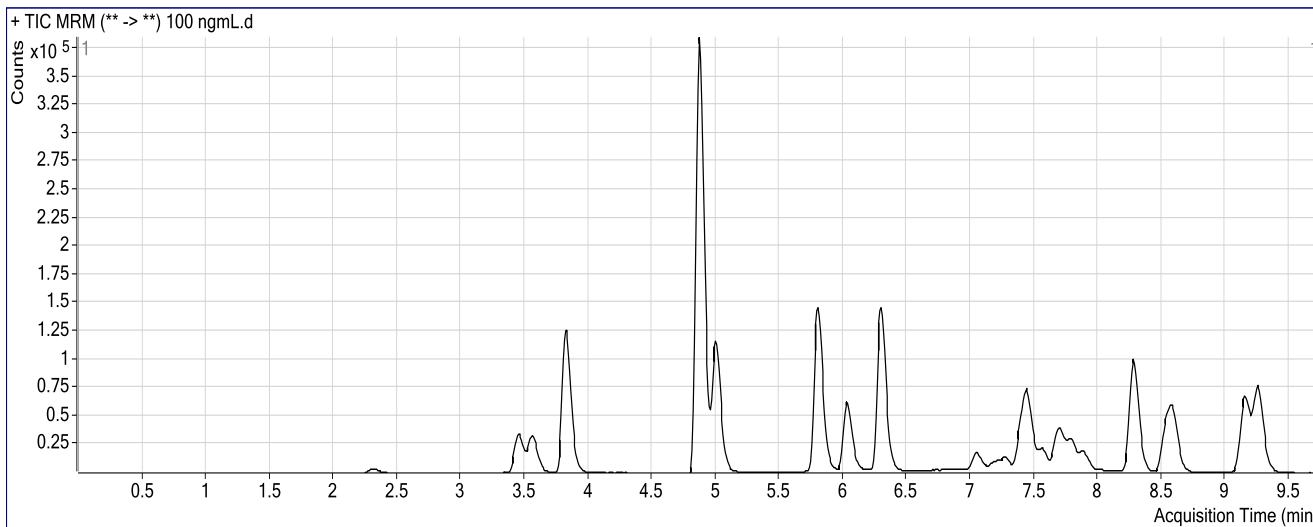
Benzodiazepine Analysis Report

Batch Data Path C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.ba
Analysis Time 4/11/2019 11:12 AM **Analyst Name** datastor
Report Time 4/11/2019 11:14 AM **Reporter Name** datastor
Last Calib Update 4/11/2019 11:12 AM **Batch State** Processed

Analysis Info

Acq Time 2019-04-09 14:11 **Data File** 100 ngmL.d
Sample Type Calibration **Sample Name** 100 ngmL
Dilution 1 **Acq Method** Benzos_Z_Drugs_ACN_FA_ISP_2019.m
Position P1-A5 **Sample Info** Worklist 3246
Inj Vol -1 **Comment** AM 13 Benzo and Z by LCQQQ

Sample Chromatogram



Results

| Compound | ISTD Compound | RT | Response | ISTD Resp | Resp Ratio | Final Conc |
|-------------------------|--------------------------------|-------|----------|-----------|------------|------------|
| 7-Aminoclonazepam | 7-Aminoflunitrazepam-D7 ISTD | 2.317 | 19813 | 156834 | 0.1263 | 101.5801 |
| 7-Aminoflunitrazepam | 7-Aminoflunitrazepam-D7 ISTD | 3.565 | 131920 | 156834 | 0.8411 | 105.5195 |
| zopiclone | Nordiazepam-D5 ISTD | 3.825 | 334306 | 35510 | 9.4145 | 99.7014 |
| zolpidem | Nordiazepam-D5 ISTD | 4.875 | 1337486 | 35510 | 37.6654 | 103.8644 |
| Chlordiazepoxide | Nordiazepam-D5 ISTD | 5.003 | 369487 | 35510 | 10.4053 | 104.8410 |
| quetiapine | Temazepam-D5 ISTD | 5.800 | 432883 | 171141 | 2.5294 | 114.3534 |
| Midazolam | Clonazepam-D4 ISTD | 6.030 | 228855 | 94628 | 2.4185 | 103.4885 |
| Flurazepam | Diazepam-D5 ISTD | 6.294 | 589936 | 214159 | 2.7547 | 107.9145 |
| Nitrazepam | Clonazepam-D4 ISTD | 7.051 | 49798 | 94628 | 0.5262 | 100.6484 |
| alpha-Hydroxyalprazolam | alphahydroxyalprazolam-D5 ISTD | 7.223 | 11168 | 18678 | 0.5979 | 93.2583 |
| alpha-hydroxytriazolam | Nordiazepam-D5 ISTD | 7.272 | 33906 | 35510 | 0.9548 | 94.6705 |
| Oxazepam | Nordiazepam-D5 ISTD | 7.438 | 157597 | 35510 | 4.4382 | 102.9863 |
| Nordiazepam | Nordiazepam-D5 ISTD | 7.566 | 49602 | 35510 | 1.3969 | 99.1485 |
| Clonazepam | Clonazepam-D4 ISTD | 7.714 | 70611 | 94628 | 0.7462 | 99.4471 |
| Lorazepam | Nordiazepam-D5 ISTD | 7.789 | 25628 | 35510 | 0.7217 | 106.5690 |
| Alprazolam | alphahydroxyalprazolam-D5 ISTD | 7.883 | 75781 | 18678 | 4.0572 | 108.7817 |
| Flunitrazepam | Clonazepam-D4 ISTD | 8.278 | 364406 | 94628 | 3.8509 | 100.8741 |
| Temazepam | Temazepam-D5 ISTD | 8.589 | 175574 | 171141 | 1.0259 | 103.8584 |
| Diazepam | Diazepam-D5 ISTD | 9.260 | 282239 | 214159 | 1.3179 | 110.6170 |

CS

ISP FORENSICS

Pocatello

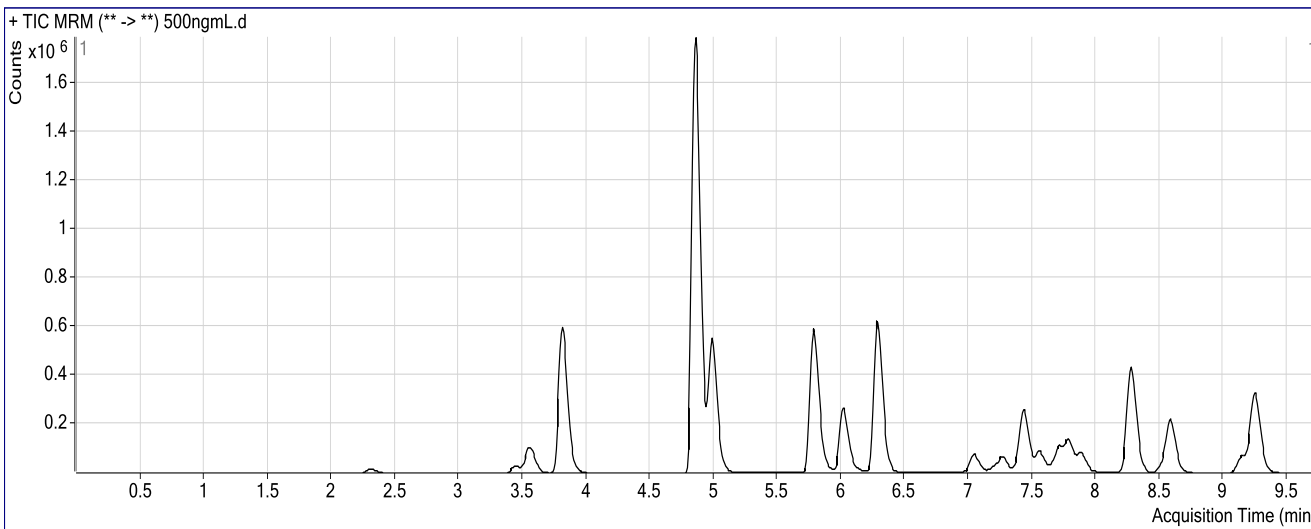
Benzodiazepine Analysis Report

| | | | |
|--------------------------|---|----------------------|-----------|
| Batch Data Path | C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.ba | | |
| Analysis Time | 4/11/2019 11:12 AM | Analyst Name | datastor |
| Report Time | 4/11/2019 11:14 AM | Reporter Name | datastor |
| Last Calib Update | 4/11/2019 11:12 AM | Batch State | Processed |

Analysis Info

| | | | |
|--------------------|------------------|--------------------|----------------------------------|
| Acq Time | 2019-04-09 14:27 | Data File | 500ngmL.d |
| Sample Type | Calibration | Sample Name | 500ngmL |
| Dilution | 1 | Acq Method | Benzos_Z_Drugs_ACN_FA_ISP_2019.m |
| Position | P1-A6 | Sample Info | Worklist 3246 |
| Inj Vol | -1 | Comment | AM 13 Benzo and Z by LCQQQ |

Sample Chromatogram



Results

| Compound | ISTD Compound | RT | Response | ISTD Resp | Resp Ratio | Final Conc |
|-------------------------|--------------------------------|-------|----------|-----------|------------|------------|
| 7-Aminoclonazepam | 7-Aminoflunitrazepam-D7 ISTD | 2.309 | 87713 | 141063 | 0.6218 | 523.2799 |
| 7-Aminoflunitrazepam | 7-Aminoflunitrazepam-D7 ISTD | 3.565 | 464925 | 141063 | 3.2959 | 468.6080 |
| zopiclone | Nordiazepam-D5 ISTD | 3.809 | 1596044 | 35858 | 44.5095 | 467.0052 |
| zolpidem | Nordiazepam-D5 ISTD | 4.858 | 6450182 | 35858 | 179.8788 | 484.2546 |
| Chlordiazepoxide | Nordiazepam-D5 ISTD | 4.994 | 1783701 | 35858 | 49.7428 | 488.1721 |
| quetiapine | Temazepam-D5 ISTD | 5.784 | 1842013 | 163374 | 11.2749 | 516.8922 |
| Midazolam | Clonazepam-D4 ISTD | 6.014 | 1021017 | 83039 | 12.2956 | 537.6230 |
| Flurazepam | Diazepam-D5 ISTD | 6.277 | 2611859 | 220443 | 11.8482 | 466.4973 |
| Nitrazepam | Clonazepam-D4 ISTD | 7.043 | 235373 | 83039 | 2.8345 | 531.5479 |
| alpha-Hydroxyalprazolam | alphahydroxyalprazolam-D5 ISTD | 7.214 | 67434 | 19404 | 3.4753 | 506.5289 |
| alpha-hydroxytriazolam | Nordiazepam-D5 ISTD | 7.264 | 184053 | 35858 | 5.1328 | 483.1387 |
| Oxazepam | Nordiazepam-D5 ISTD | 7.430 | 765951 | 35858 | 21.3604 | 480.0051 |
| Nordiazepam | Nordiazepam-D5 ISTD | 7.558 | 247067 | 35858 | 6.8900 | 483.8133 |
| Clonazepam | Clonazepam-D4 ISTD | 7.714 | 326376 | 83039 | 3.9304 | 522.9969 |
| Lorazepam | Nordiazepam-D5 ISTD | 7.780 | 115655 | 35858 | 3.2253 | 468.0258 |
| Alprazolam | alphahydroxyalprazolam-D5 ISTD | 7.883 | 399978 | 19404 | 20.6136 | 540.8963 |
| Flunitrazepam | Clonazepam-D4 ISTD | 8.270 | 1639578 | 83039 | 19.7446 | 519.0885 |
| Temazepam | Temazepam-D5 ISTD | 8.580 | 842237 | 163374 | 5.1553 | 510.8091 |
| Diazepam | Diazepam-D5 ISTD | 9.252 | 1306193 | 220443 | 5.9253 | 498.5518 |

ISP FORENSICS

Pocatello

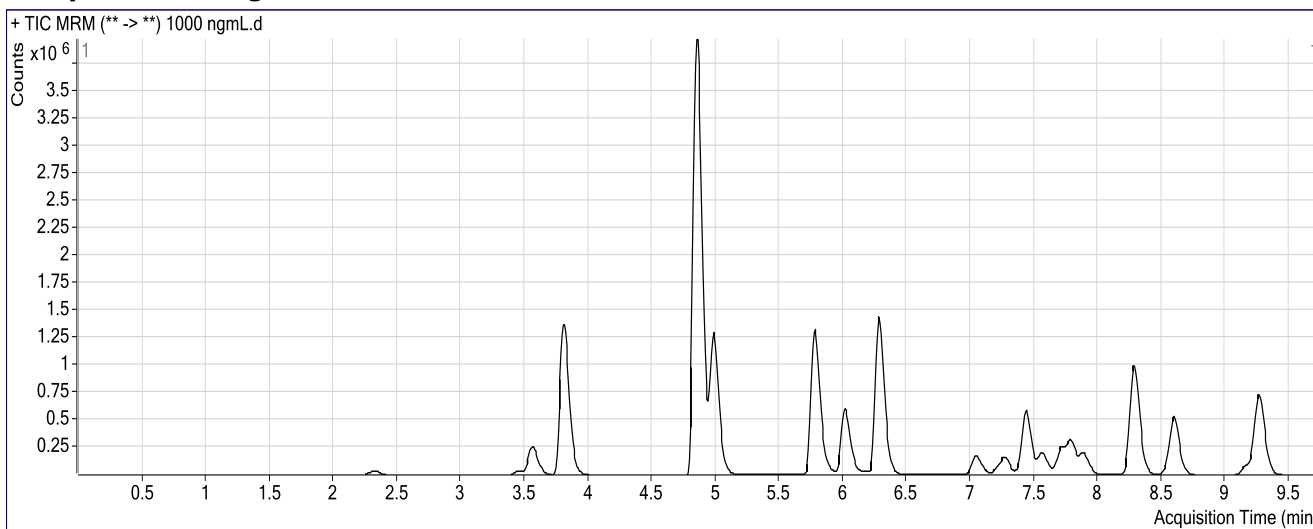
Benzodiazepine Analysis Report

| | | | |
|--------------------------|---|----------------------|-----------|
| Batch Data Path | C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.ba | | |
| Analysis Time | 4/11/2019 11:12 AM | Analyst Name | datastor |
| Report Time | 4/11/2019 11:14 AM | Reporter Name | datastor |
| Last Calib Update | 4/11/2019 11:12 AM | Batch State | Processed |

Analysis Info

| | | | |
|--------------------|------------------|--------------------|----------------------------------|
| Acq Time | 2019-04-09 14:43 | Data File | 1000 ngmL.d |
| Sample Type | Calibration | Sample Name | 1000 ngmL |
| Dilution | 1 | Acq Method | Benzos_Z_Drugs_ACN_FA_ISP_2019.m |
| Position | P1-A7 | Sample Info | Worklist 3246 |
| Inj Vol | -1 | Comment | AM 13 Benzo and Z by LCQQQ |

Sample Chromatogram



Results

| Compound | ISTD Compound | RT | Response | ISTD Resp | Resp Ratio | Final Conc |
|-------------------------|-----------------------------------|-------|----------|-----------|------------|------------|
| 7-Aminoclonazepam | 7-Aminoflunitrazepam-D7 ISTD | 2.317 | 214157 | 193047 | 1.1093 | 964.4209 |
| 7-Aminoflunitrazepam | 7-Aminoflunitrazepam-D7 ISTD | 3.565 | 1121794 | 193047 | 5.8110 | 1045.0903 |
| zopiclone | Nordiazepam-D5 ISTD | 3.809 | 3786942 | 39629 | 95.5601 | 1001.2997 |
| zolpidem | Nordiazepam-D5 ISTD | 4.850 | 15178943 | 39629 | 383.0270 | 1011.2094 |
| Chlordiazepoxide | Nordiazepam-D5 ISTD | 4.986 | 4177088 | 39629 | 105.4051 | 1008.9573 |
| quetiapine | Temazepam-D5 ISTD | 5.775 | 4160405 | 203638 | 20.4304 | 952.5180 |
| Midazolam | Clonazepam-D4 ISTD | 6.014 | 2301359 | 109515 | 21.0141 | 941.3291 |
| Flurazepam | Diazepam-D5 ISTD | 6.277 | 6188493 | 262968 | 23.5333 | 944.9704 |
| Nitrazepam | Clonazepam-D4 ISTD | 7.051 | 581009 | 109515 | 5.3053 | 992.1641 |
| alpha-Hydroxyalprazolam | alphahydroxyalprazolam-D5 ISTD | 7.214 | 162534 | 24143 | 6.7322 | 997.6202 |
| alpha-hydroxytriazolam | Nordiazepam-D5 ISTD | 7.272 | 450779 | 39629 | 11.3750 | 1030.6168 |
| Oxazepam | Nordiazepam-D5 ISTD | 7.438 | 1831912 | 39629 | 46.2267 | 1004.4330 |
| Nordiazepam | Nordiazepam-D5 ISTD | 7.566 | 583270 | 39629 | 14.7183 | 1031.9934 |
| Clonazepam | Clonazepam-D4 ISTD | 7.714 | 790920 | 109515 | 7.2220 | 969.0685 |
| Lorazepam | Nordiazepam-D5 ISTD | 7.789 | 285849 | 39629 | 7.2131 | 1031.5795 |
| Alprazolam | alphahydroxyalprazolam-D5 ISTD | 7.891 | 1010862 | 24143 | 41.8699 | 1095.6768 |
| Flunitrazepam | Clonazepam-D4 ISTD | 8.278 | 3774308 | 109515 | 34.4638 | 920.7661 |
| Temazepam | Temazepam-D5 ISTD | 8.597 | 2108226 | 203638 | 10.3528 | 1010.2296 |
| Diazepam | Diazepam-D5 ISTD | 9.268 | 2982359 | 262968 | 11.3412 | 954.5572 |

CS

ISP FORENSICS

Pocatello

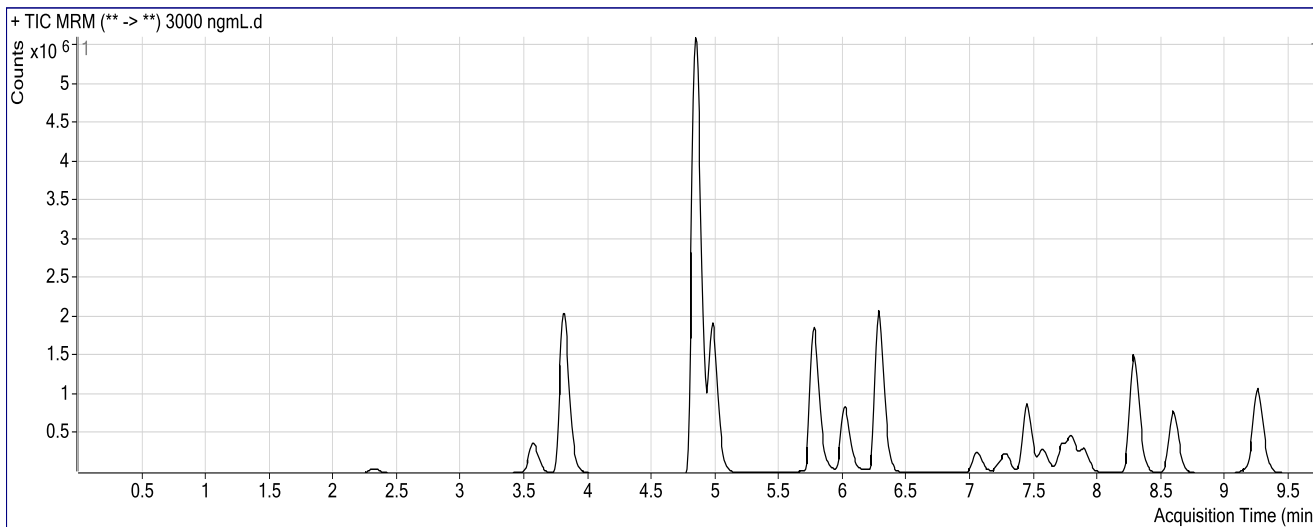
Benzodiazepine Analysis Report

| | | | |
|--------------------------|---|----------------------|-----------|
| Batch Data Path | C:\MassHunter\Data\2019\AM 13\AM 13 Worklist 3246 Urine 040919 CS\QuantResults\am 13 worklist 3246.ba | | |
| Analysis Time | 4/11/2019 11:12 AM | Analyst Name | datastor |
| Report Time | 4/11/2019 11:14 AM | Reporter Name | datastor |
| Last Calib Update | 4/11/2019 11:12 AM | Batch State | Processed |

Analysis Info

| | | | |
|--------------------|------------------|--------------------|----------------------------------|
| Acq Time | 2019-04-09 14:58 | Data File | 3000 ngmL.d |
| Sample Type | Calibration | Sample Name | 3000 ngmL |
| Dilution | 1 | Acq Method | Benzos_Z_Drugs_ACN_FA_ISP_2019.m |
| Position | P1-A8 | Sample Info | Worklist 3246 |
| Inj Vol | -1 | Comment | AM 13 Benzo and Z by LCQQQ |

Sample Chromatogram



Results

| Compound | ISTD Compound | RT | Response | ISTD Resp | Resp Ratio | Final Conc |
|-------------------------|---------------------------------|-------|----------|-----------|------------|------------|
| 7-Aminoclonazepam | 7-Aminoflunitrazepam-D7 ISTD | 2.325 | 304838 | 102998 | 2.9596 | 3010.9474 |
| 7-Aminoflunitrazepam | 7-Aminoflunitrazepam-D7 ISTD | 3.573 | 1576751 | 102998 | 15.3085 | |
| zopiclone | Nordiazepam-D5 ISTD | 3.809 | 5832562 | 18360 | 317.6706 | 3325.9049 |
| zolpidem | Nordiazepam-D5 ISTD | 4.842 | 22294071 | 18360 | 1214.2470 | 3000.5958 |
| Chlordiazepoxide | Nordiazepam-D5 ISTD | 4.977 | 6273398 | 18360 | 341.6807 | 2999.2140 |
| quetiapine | Temazepam-D5 ISTD | 5.767 | 5935066 | 99888 | 59.4175 | 3014.7695 |
| Midazolam | Clonazepam-D4 ISTD | 6.014 | 3207083 | 54587 | 58.7515 | 3017.3717 |
| Flurazepam | Diazepam-D5 ISTD | 6.277 | 9102866 | 130459 | 69.7756 | 3098.5934 |
| Nitrazepam | Clonazepam-D4 ISTD | 7.051 | 873112 | 54587 | 15.9948 | 2977.4248 |
| alpha-Hydroxyalprazolam | alphanhydroxyalprazolam-D5 ISTD | 7.223 | 251884 | 13852 | 18.1846 | 2999.7944 |
| alpha-hydroxytriazolam | Nordiazepam-D5 ISTD | 7.272 | 682439 | 18360 | 37.1690 | 2994.0404 |
| Oxazepam | Nordiazepam-D5 ISTD | 7.447 | 2855272 | 18360 | 155.5124 | 3008.9829 |
| Nordiazepam | Nordiazepam-D5 ISTD | 7.575 | 843116 | 18360 | 45.9203 | 3216.9438 |
| Clonazepam | Clonazepam-D4 ISTD | 7.714 | 1171055 | 54587 | 21.4529 | 3006.9963 |
| Lorazepam | Nordiazepam-D5 ISTD | 7.797 | 402264 | 18360 | 21.9093 | 2994.9171 |
| Alprazolam | alphanhydroxyalprazolam-D5 ISTD | 7.891 | 1516986 | 13852 | 109.5177 | 2861.2576 |
| Flunitrazepam | Clonazepam-D4 ISTD | 8.278 | 5685107 | 54587 | 104.1472 | 3070.4883 |
| Temazepam | Temazepam-D5 ISTD | 8.589 | 3220961 | 99888 | 32.2459 | 2979.8146 |
| Diazepam | Diazepam-D5 ISTD | 9.252 | 4405400 | 130459 | 33.7684 | 2842.8927 |